TO

Dr. Curtis G. Hussey,

OF PITTSBURG, PA.

PRINCIPLES

OF THE

ECONOMIC PHILOSOPHY

OF

SOCIETY, GOVERNMENT AND INDUSTRY

BY

VAN BUREN DENSLOW, LL.D

CASSELL & COMPANY, LIMITED
104 & 106 FOURTH AVENUE, NEW YORK

COPYRIGHT,
1888,
BY O. M. DUNHAM.

All rights reserved.

Press W. L. Mershon & Co.,
Rahway, N. J.

CONTENTS.

(Figures preceding sub-titles refer to sections of volume.)

PAGE

PREFACE xi

PERSONAL INDEX xix

CHAPTER I.—SCOPE AND METHOD 1

1. Definitions.—2. Is Political Economy a Science.—3. Political Economy also an Art.—4. The Deductive, *a priori*, or Metaphysical Method.—5. Decline of the Metaphysical and Rise of the Historical Method.—6. Carey's Corrective Influence.—7. The Historical Method is Not a History of Opinion Merely.—8. Limitations on the Historical Method.—9. Relation of Economics to Ethics.—10. The Scientific Method.—11.—The Philosophy of Statistics.—12. The Result of Statistics.—13. Utility of Statistics.—14. Regularity of Phenomena Shown by Statistics.—15. Statistics Taken with a Bias.—16. The American Impulse toward Economic Progress.—17. The United States as an Economic Instructor.

CHAPTER II.—WEALTH 41

18. Wealth and Poverty—Social.—19. Savage Life—Social Poverty.—20. Ownership by the Tribe—Barbarism.—21. Tribal Ownership Depends on Occupancy and Use.—22. Tribal Precedes State Ownership.—23. Charitable and Religious Communism.—24. Relative Inducement to Effort under Both Systems.—25. Wealth Dependent on Exchange—How Far.—26. Private or Individual (Including Corporate) Wealth.—27. The Commonwealth.—28. The Family and Its Wealth.—29. Social and Spiritual Wealth.—30. The Wealth of Nations.—31. The Evanescence of Wealth.—32. Can Poverty be Abolished?

CHAPTER III.—VALUES AND PRICES 79

33. What is Value?—34. Fallacy of Resting Value on Labor.—35. Whence Comes Value?—The Consumer.—36. The Consumer's Place in Industry.—37. Karl Marx's Theory of Value.—38. Why Men Exchange.—39. The Theory of Value.—40. Markets are the Index of Values.—41. Freedom in Establishing Prices.—42. Cornering the Market.—43. How Prices are Made.—44. Errors Concerning Causes of Prices.—45. Tooke on Prices.—46. Prices Rise in Disproportion to Scarcity.—47. Permanent and Temporary Cheapness.—48. Relation of Prices to Freedom.—49. Countries of Low and High Prices.

CHAPTER IV.—TITLE AND USE.... 125

50. Title and Labor.—51. Title Dates from Seizure or Appropriation.—52. Private Title is Monopoly.—53. The State as a Form of Monopoly.—54. Title the Source of Exchange, and of Division of Labor.—55. Titles Becoming Private.—56. The American Land System.—57. Effect of Free Land on Immigration.—58. Wasting the Land.—59. American Railway System in Its Unproductive Infancy.—60. The Era of Consolidation.—61. Great Land Grants to Railways.—62. Socialistic Reaction Against Railways.—63. Objections to Socialistic Theories Concerning Railways.

CHAPTER V.—PROFIT AND LOSS..... 162

64. The Beginnings of Industry.—65. Capital and Labor to be Partners.—66. Organization of Labor by Force.—67. Adam Smith on Wages.—68. Equivalence of Exchange in the Wages Contract.—69. Instances of Equality of Division.—70. Productive Industry is a Form of Social Government.—71. Do the Indispensable Means of Labor Earn a Share of the Product ?—72. Does the Risk of Loss Give Valid Title to the Profit ?—73. Loss as well as Profit an Economic Force.—74. The Rate of Profit.

CHAPTER VI.—CAPITAL..... 196

75. Definitions.—76. Distribution of Wealth Precedes and Causes Production.—77. Is Economic Distribution Just ?—78. Dispersion of Capital is a Mode of Destroying It.—79. How Distribution of Wealth Attends its Accumulation and Getting Rich is Doing Good.—80. The Greater the Accumulation of Reproductive Wealth, the More Equal the Diffusion of Enjoyable Wealth.—81. Capital as a Laborer.—82. Forms of Capital.—83. Capital as an Emancipator.—84. Re-distribution of Ill-used Wealth.—85. Distribution by Luxury.—86. Its Humanity Arraigned.—87. Society's Gain by Economy.—88. Society's Gain by Large Accumulations.—89. Large Capitals Lessen Consumption.—90. Effects of Large Capitals on Rates of Wages.—91. Constancy of Returns.—92. What Makes High Profits?—93. Malthus' So-called Law.—94. Fewer Producers—Less Production.—95. Wages are Also Capital.

CHAPTER VII.—LAND..... 237

96. Values of Land.—97. True Cause of Rent.—98. Rent and Transportation.—99. Rent as a Balance to Transportation.—100. Rent as a Dispersive Force on Population.—101. Exhaustion of Soils.—102. Values of Land Due to the Consumers of Land Products.—103. Machinery in Farming.—104. Effects of Releasing Labor by Machinery.—105. Tenant Farms and Large Holdings in America.—106. Large and Small Land Holdings in England.—107. Land in Ireland.—108. Evolution of Cultivated Plants as Sources of Food.

CHAPTER VIII.—LABOR..... 281

109. Definition of Labor.—110. Work Differs from Labor.—111. All Labor Can Not be Agreeable.—112. Labor Less Broad than Production.—113. The "Wage Fund" Doctrine.—114. The Rate of Wages and Margin of Profits.—115. Is Population a Check on Wages? —116. Countries of High and Low Wages.—117. Labor-Saving Machines.—118. Labor Combinations.—119. Arbitration and Labor Courts.—120. Labor Agitations for a Social Revolution.—121. Causes which Compel Men to Work for Wages—122. The Organization of Labor in Industry.—123. The Terms of Partnership, Labor, and Capital.—124. Effect of Importation of Competing Products on the Wages of Labor.—125. Effect of Military Protection to Foreign Trade on Home Wages.—126. Diversity of Industries Essential to High Wages.—127. Exclusion of Immigration as a Measure to Promote Wages.—128. The Barter of Domestic Labor for Domestic Labor Promotes Domestic Wages.—129. Wages of Social Labor.—130. Wages of Women.

CHAPTER IX.—MONEY..... 329

131. What is Money?—132. Origin of Money.—133. The Form of Money.—134. The Substance of Coins.—135. Changes in British Coinage.—136. The Standard.—137. The Ratio between the Money Metals.—138. Exchangeable Credit as Quasi Money.—139. Bills of Exchange and Notes.—140. Money of Account.—141. Bank Deposits and Checks.—142. Bank Notes.—143. Government Notes and Debts.—144. The Volume of Credit.—145. Relative Cost and Economy of Coin and Credit—Fiat Money.—146. Variations in the Volume of Money.—147. The Single and Double Standard.—148. Rate of Production of Gold and Silver.

CHAPTER X.—CRISES..... 370

149. Crises Defined.—150. Crises Produced by Excessive Importation of Competing Products.—151. Competing Imports Again the Cause.—152. Exhaustion of Capital.—153. Great Wars Seldom, if Ever, Produce, but Often Avert or Remedy Crises.—154. The American Crisis of 1837.—155. Crisis of 1857.—156. The Crisis of 1866.—157. The Crisis of 1873-9.—158. The Balance of Trade.—159. Doctrine of the Balance of Trade.—160. Are Crises Useful or Penal?

CHAPTER XI.—THE STATE..... 398

161. Government Is Natural.—162. Interest Organizes Industry.—163. The Motive Force in Industry.—164. Forms of Government Dependent on the Evolution of Occupations.—165. Governments Classified.—166. Parliamentary and Representative States,—167. Diversity of Form in Republics.—168. Diversity of Functions and Objects.—169. Local Govern ment.—170. The State as Related to Industry.—171. Coercion and Attraction in the State.—172. Government by Force.—Voting by Males.—173. Armies and Their Cost.—174. Crime and Its Punishment.—175. Social Crimes and Insanities.—176. The Recent Growth of Debt.

CHAPTER XII.—TAXATION.. 452

177. Origin of Taxes.—178. Standards of Equal Taxation.—179. An Ideal Theory of Taxation.—180. The Search for the Incidence of Taxation, and of Specific Taxes.—181. The Practice of Modern Governments in Taxation.—The United States.—182. Taxation in Great Britain.—Local.—183. General Taxation in Great Britain.—184. India.—Taxation by Profits of Enforced Foreign Trade.—185. Taxation by Profits of Enforced Trade.—Turkey.—186. Taxation by Profits of Enforced Trade.—Ireland.

CHAPTER XIII.—TAXATION CONTINUED..... 496

187. France. — Conditions. — 188. France. — Revenues. — 189. France, as Discussed by Smith.—190. Taxation as a Cause of Production. — Beet Sugar. — 191. The Sophisms of Bastiat.—192. Modern Germany.—Protective Taxation a Source of National Unity.—193. Germany's Present System of Taxation. — 194. Revenue System of Russia.—195. English Colonies.—196. China and Japan.

CHAPTER XIV.—THE FREE TRADE CRITICISM..... 555

197. Methods of Argument Concerning Protection and So-called Free Trade.—198. Sidgwick on Protection to Native Industry.—199. Moffat on Protection in Growing Countries. — 200. Devas on Protection.—201. Prof. Perry's Free-Trade Methods.—Does or Does Not Free Trade Employ Foreign Labor?—202. Why Canadians May Not Have Free Trade with Vermont.—203. The Profit Argument.—Protection Profits a Nation or Nations Would Not Protect.—204. Cost of Labor in America and Europe.—205. Making Taxes Productive.—206. Collecting Taxes from Foreign Producers.—207. Whether the Duty Raises the Price on the Whole Domestic Product.—208. Getting Cutlery by Making Buttons.—209. Must a Nation Import Commodities in order to Export Them, or Buy Them in order to Sell Them?—210. The Theory of Barter Does Not Aid the Free-Trade Criticism.—211. Private, Special, and Public Interests.—212. Protection Universal.

CHAPTER XV.—ECONOMY OF PROTECTION..... 609

213. How a Tariff May Protect Producers.—214. When Duties on Imports Protect from Taxation.—215. When Protection Promotes Production.—216. Protection Promotes Wages.—217. Protection Promotes National Unity and Peace.

CHAPTER XVI.—STATE ACTION IN RELATION TO SPECIAL INDUSTRIES..... 631

218. Silk.—219. Decline of Silk Manufacture in England.—220. Evolution of Glass Manufacture.—221. Evolution of Iron and Steel Manufacture.—222. Rivalry between Great Britain and America.—223. American Ship-Building, Coasting and Ocean Vessels and Carrying Trade.—224. Evolution of Manufactures in Canada.—225. The Sheep and Wool.—226. Wool a Finished Product.—227. Rate of Consumption of Wool.—228. The Protection of Wool and Woolens in Europe.—229. Wool Culture in America.—230. Woolen Industry of England.—231. The Cost of Protection to the Woolen Manufacture.—232. Cotton, Antiquity and Modern Growth of the Industry.—233. The Cotton-Growing Industry of the United States.—234. Cotton as a Power in Politics.—235. The Cotton Famine of 1860-5.—236. Destruction of Quinine Manufacture in the United States.—237. The Salt Industry as Related to the Tariff.—238. Leather, Boots and Shoes.—239. Industries Must be Unprofitable as well as Desirable to Merit State Action.—240. Private and Public Purposes.—241. *Post Hoc, Ergo Propter Hoc.*

GENERAL INDEX..... 709

PREFACE.

Students of Political Economy are more often the old than the young; and more largely those who have already given much time and thought to its mastery, than those to whom the effort is new. I am satisfied that what both classes desire is an extended but convenient repository of accessible facts, avoiding dogma and abstraction, but allowing human experience and history to convey their own lesson. In the work of teaching Political Economy to young men, I found their perceptions generally keener than their text-books were adapted to satisfy. Still more, in responding to the innumerable inquiries made of an economic daily journalist, I have discovered that the people could not find in the books of current discussion of economic theories any answers whatever to the practical questions on which they sought light. Or if the questions were answered it was easy to perceive that the answer in many cases was false, partial, or obscure. Instead of the book being above the student or the inquiring public, it was either below, or irrelevant to both. I have therefore assumed in preparing this book that society contains no fact or feature which its reader will not fully comprehend if the story be told clearly and simply. I have tried to do only this. I trust my work may prove acceptable to the students of Political Economy in this and other lands, in the degree in which it fairly reflects the opinions of statesmen, the wisdom of nations, the views of practical men and men of affairs—for these get nearest to the truth of things.

The fundamental view of economics which may be said to inspire and give structure to the book, is that to be true or useful economic science must be no longer destructive but constructive. It must study to explain how things actually are, before plunging into the question whether they are as they ought to be. In doing this it must make appreciative exposition precede criticism. The history of the battle must first be given before the generals who led in it are court-martialled and shot. Political Economy has thus far been conducted in a way that makes it a

body of fault-finding and carping, by men innocent of any connection with government and but slightly acquainted with business, as to the effect of that legislation whose responsibilities they have never borne, upon that industry toward which they maintain a parasitic rather than a controlling relation.

However political economists may seek to dodge it by their definitions, Political Economy is a criticism upon statesmanship, so long as it continues to be any thing. They may say it is a "science of sales" only, and that there is nothing of a political nature about it; that it has been wrongly named; that it should be called Catallactics, or Plutology, or the like. But to this the statesmen may reply: "Why, then, do you bore us with it? We have no time to do more than acquaint ourselves with those sciences and arts which have a bearing upon government. You say yours has not. If your science is that of selling and exchanging, go on with your didactical exposition of swapping and trading. It has no more to do with us than a treatise on weaving or spinning."

In fact the men who define Political Economy as a "science of sales" mean thereby that it is a science which teaches that the right of individuals to make sales is superior to the right of government to affect in any manner by legislation the nature or quality of the sales they shall make. They show this palpably by filling their volumes and speeches with complaints that government is interfering with sales. Not a line of Perry, Mill, or Sumner is free from this complaint. Hence their definition of Political Economy is annulled by the quality of the thing they put forth as being Political Economy. That is a critique on the relation of government to sales. If it were scientific in its quality, it would not be a science of sales, but a science of the relations which government sustains to sales. This restores the name "Political" to their "Economy." This restoration they can not escape except by letting government entirely alone. When the teachers of the "sales" school begin by saying "it is none of our business as economists whether the government interferes with trade or industry or not; our sole duty is to teach the principles on which trade and industry will proceed after government shall have adopted such interferences as it thinks proper, and the methods by which the industrial mass will adapt itself to the action of the government"; then, and not till then, will they have the right to reduce the terms of their definition to those of a science of sales only, with which government has nothing to do.

The true logic of Laissez Faire will only be reached when that Political Economy, which consists in teaching that government and sales have nothing to do with each other, shall manifest at least its sincerity, by conceding in advance that the expounders of sales have no opinion whatever concerning the functions of government. But so long as, under pretence of teaching a science of sales only, they in fact purport to convert their teaching into a complaint against all action of government that interferes with sales, lessening them in one direction and promoting them in another, they are bound to begin by an exposition of government itself; for peradventure the right of the individual to sell may by possibility be subordinate, as a fact in social science, to the right of governments to regulate sales. It may even appear that much of the economic value of the individual's right to sell may depend on the fidelity with which government shall govern his sales.

But supposing the contrary to be true, the sales school can not teach it to be so without teaching the functions of government, and the instant they do this they cease to be a "sales" school. Political Economy passes from a science of sales into a science of the relation between government and sales.

Apprehending that Political Economy must needs teach the functions of government concerning industry it next follows that the economist must no longer be a member of a mere sect of anti-government critics. Political Economy can not attain its true dignity, as a scientific expositor of the relations of government to industry, so long as the statesmen of the world monopolize the ability to see things as they are, and to do things in a way that is practicable, while the economists indulge in the mere imaginative occupation of theorizing in the subjunctive mood as to how they might, could, would, or should be. It is time that the economists of every country had ceased to be a sect antagonizing the statesmen; especially is it time that the economists of America, France, and Germany had ceased, in antagonizing the statesmen of their own country, to fall into a species of disloyal alliance with the statesmen of countries whose economic interests may not be in harmony, in certain important and vital respects, with their own.

A second fundamental idea of this book is that nations are collective persons, having each its individuality and its career to pursue, in a certain logical continuity with those antecedents which have brought it where it is, and hence that any given economic expedient, to be understood, must be studied in the

light of the antecedent career of the nation adopting it. An import duty of $1.25 per pound, or say 1200 per cent., on cigars, or an enactment prohibiting the domestic cultivation of tobacco—both of which exist in England, and are deemed wise, by wise men—would not even address themselves to the discretion of an American for calm consideration. The duty would here be too preposterous to be proposed, and the enactment could not be passed at all by virtue of any power with which our national government is clothed by the written constitution. It is as impossible of adoption in America as Herod's decree for the slaughter of the Innocents would be of imitation by one of our Collectors of Internal Revenue. Hence to assume that in a college class room the enactment of a duty of 5*s.* sterling on cigars, or the prohibition of the cultivation of tobacco, can be discussed on the cosmopolitan plane, without recognizing nations as distinct integral persons, having each its career determined largely by its peculiar antecedents, is to incapacitate ourselves wholly for the intelligent apprehension of the subject. The revenue legislation of England is no better adapted to any such cosmopolitan tests than that of any other country. Its tobacco taxes, its exemption of land and capital from direct taxation, its policy of aggression among the barbarian races in behalf of its manufactures and its export trade, are all as impossible in our national economy as its conquest of India, its nobility, or its church establishment. Hence, to take a simple act of legislation concerning one point, a duty on wool for instance, and discuss it as if were the same thing in one country as in another, is not to discuss it at all. Countries must be studied like careers, as continuous and consecutive wholes, and to this end a little must be known of the organization and structure of each before we seek to pass upon its conduct. If it have fins it will not climb. If it have claws it may not swim. It will obey the inner law of its constitution, be its career long or brief.

Hence, in this work, the prominence given in the chapter on the State to the quality and, so far as might be, the true inwardness of political institutions, is in harmony with the first fundamental view above taken, that Political Economy is an exposition of the economic aspects of statesmanship. But a state is a mechanism, and no two mechanisms are alike. Each engineer masters only his own engine. The others would explode under him. I have endeavored to lay bare chiefly and fairly, in discussing the workings of the English and American constitutions, those features in both which their own most fair-minded states-

men, either on the one hand admire, or on the other deplore. For the people of either country, so long content with using such political machinery as they found themselves provided with to promote their material interests, may at any moment find a lull in their activities, in which to overhaul and seek even to mend their political machinery. Ancestor-worship forms but a small part of the intellectual equipment of the people of either country if they come to believe that they can improve the political mechanism in its actual workings. It has been deemed fitting, therefore, to make clear the unity between the national mechanism, which is after all only the embodied people, and the same people when viewed in their industrial aspects as producers and consumers. It is not merely that the Political State and Industrial State are companions on the same road, but the Political State is shown to be the apparel of which the Industrial Life of the people is the wearer.

To some it may seem that certain policies, pursued by the governing powers both in Great Britain and America, are treated with an acerbity that throws the book out of tune with the statesmanship of both countries. In America, the drifting away from the intent of the framers of the Constitution, in respect to the mode of selecting the President, and the increasingly autocratic tendencies of the Presidential office, may be deemed to have been so treated. In discussing economic features of the British Empire, the chief points of criticism are the very unequal degree in which the various populations composing it have found it possible to secure the friendly regard of Parliament, and the consequent voluntary abandonment of the farmers to unequal competition with those of other countries, after certain classes of the manufacturers, through four centuries of protection, had ceased to need its further continuance. The judicious reader will discover, and the adverse concede, that among the truer and higher statesmen of the country whose legislative or administrative action may be thus criticised, some, of note, have preceded me in the utterance substantially of the views here enunciated.

It is believed that the fullness of the indexes and the simplicity of the order and arrangement adopted, combined with its ample presentation, in the text, of the facts essential to guide a judgment on most economic issues, and in the notes, of the views of nearly all economists, may make it convenient as a book of reference to that very large number of persons who, if amply supplied with facts, find it not difficult to arrive at their own conclusions.

Political Economy, so far from being a dismal science, is fascinating in all its parts to all who master in any degree the clues to its right apprehension. It is even entertaining in the hands of some, every blow of whose fingers upon its strings evolves only discord and misapprehension. In its fairer spirit and fuller apprehension it will become the mediator between all of society's extremes of condition, race, and culture—between the poor and the rich, the virtuous and the criminal, the wise and the unlearned, the governors and the governed, and, among nations, between the monarchical and the republican, the debtor and the creditor, the Christian and the heathen. It reconciles man to himself by acquainting him with himself in others. The proper study of society is society. No other study can be so broad or so enlightening. I do not with Jevons think it can be greatly helped by measuring gains and losses of pleasurable emotion against each other with algebraic signs and symbols. Nor with Mill can I attach profound value to tenuous speculations pervaded by metaphysical subtlety. Nor, with Senior, am I prepared to dispose of conditions of society, past, present, or future, wherein wealth arises, of kinds that are not exchangeable, and in modes that are not due to competition, nor measurable in coin values, which it becomes perhaps impossible or even criminal to buy or sell, by saying that they are not economic conditions, and that the society in which they arise would not be an economic world. It is sufficient for me that they are, have been, and may long continue to be, a part of actual society, government, and industry, and that they have economic effects. The family, the church, the state, the college, the literary, artistic, and social world are full of priceless values that do not arise by competition, but exclude it; society is in part organized and held in place by means of these unpurchasable values which it is proud to know are not exchangeable. They create coöperation. They inspire trust. They promote united action. Honor, Law, Patriotism, Fidelity are as much parts of the existing social wealth of the world as profits, money, and exchange. Hence, to limit economic discussion to the consideration of things that can be bought and sold may be to emasculate, disinspire, and destroy it.

Finally Economic Science is a continuing inspiration. It can only be petrified into fixity, after it has lost its living principle. As an inspiration it leads, but it can not halt. Its future can not be dwarfed by recognizing its present state as final. It must

migrate to new fields of instruction as the old lose their interest, by the same law by which its chief factors, profits, and wages avoid the declining rate of compensation in old investments, by themselves passing on to new efforts, new processes, and new places. So Political Economy will find its new rate of profit and higher wage in advancing to new forms of thought, new expositions, new fields and themes. Its spirit must keep pace with the march of the industries and the governments. In its present stage of development it is not unlike the early systems of placer mining for gold. The one rule which governed finding it was "where you find it, there it is." In judging of its value the placer system further enriches our language with the proper test. It is "worth what it pans out." The ore in this book is now ready to be submitted to the sieve. The reader will shake the sieve and hold the pan. Interested vitriol throwers will stand around and express a doubt whether the glistening grains are not pyrites. If so, let the acid thrower have free fire at every grain. So many as remain will be the fine gold of commerce and of nations.

POTTER BUILDING, New York, May 1, 1888.

PERSONAL INDEX.

[Many facts of economic importance stand associated with the names of actors in prominent events rather than with those of economic teachers or critics. Such is the connection of Colbert with French manufactures or of Cortez with the increased supply of silver. As the purpose of an index is to give the reader the clews most likely to enab e him to find what he is searching for, it is believed that such an index will prove more valuable than the tabulated list of authors cited, which is also conveniently included in it. It shades outward toward names whose connection with the current of economic history is slight or trivial. But an index of authors cited picks up in like manner many whose contribution to the course of discussion has been slight. The present Index is designed simply to aid the reader in his special search for facts.]

A.

Abel, 603, 668
Abraham, 166, 333
Academy, French (Institute de France), 466
"Academy," London, 490
Achard and beet sugar, 503
Achilles, 334
Adams, Prof. H. C., on debts, 353, 448--451; on special interests, 603, 653, 654
Agricultural Report, 96, 106, 252; of Ohio, 254; of the United States, 256
Albert, Prince, 215
Alexander of Macedon, 276, 279, 331
Alison, Sir Archibald, 359
Alton farm, 269
American Encyclopædia, 255
American Association for Advancement of Science, 650
American Iron and Steel Association, Bulletin of, 555; on prices of English and American iron and steel goods, 590
American Wool Growers' Association, 669
Annales de Chimie, 503
Anne, coinage, 342
Aristotle, definition of political economy, 2, 405; women owned land, 61; on value, 82; on title, 131
Archangel Michael, 340
Arkwright, 189, 681, 684
Asiatic Museum in St. Petersburg, 334
Atchison, Topeka and Santa Fe Railroad Company, 157
Atkinson, Edward, on profit sharing, 179, 180; decline of profit, 195; on wages, 219, 294; on product, 224, 229
"Atlantic Monthly," 553
Ailesbury, Marquis of,—land of, 270
Augustus, 668

B.

Bacon, Lord, on balance of trade, 393
Baird, H. C., on price, 117
Bakewells and Co., glass, 640
Baltimore and Ohio Railroad Co., 153
Baring, Sir Evelyn, on India, 66
Bastiat, Frederic, 3; definition of political economy, 16; definition of wealth, 42; definition of value, 80, 82; on declining returns, 229; on choice between wages and profits, 234; rent, 241, 503; "Sophisms" of, reviewed, 506–514; "Harmonies Economiques," 507
Battersley's "Repealer's Manual," 493

Bayard, Stephen, 639
Beaconsfield, Lord, 20; on gold standard, 362; on protection, 558, 577
Beaufort, Duke of, land of, 270
Beccaria on value, 82
Bedford, Duke of, land of, 270
Beil, G., 22
Behm and Wagner, atlas, 548
Bennett, James G., 190
Bentham, Jeremy, 444
Bentinck, Lord George, 558
Benton, Thomas H., 38, 629
Berneville, 674, 681
Bible (Numbers) 138, 277, 279
Bigelow, Mr. E. B., 678
Bishop, Hist. of American Manufactures, 694
Bismarck, Prince von, 516, 524, 577
Blackstone, Sir William, on title, 129, 130; on royalty and House of Commons, 409, 410, 453
Blaine, James G., 38, 423, 628
Board of Trade of Montreal, 666
Board of Trade Returns, 679
Bancroft on community of goods, 52
Banfield, T. E., on cause of value, 94
Bank of England, 335, 349, 370, 371, 372, 374, 375, 389, 390; Imperial Bank of Germany, 362; of Austro-Hungary, 363
Banks of St. Petersburg, France, Germany, Austria, Netherlands, and of the United States, 351, 352; of Massachusetts, New York, Rhode Island, and Iowa, 352
Bourne, on food supply, 65
Bourse, Paris, or stock market, 108
Bowen, Prof. Francis, 16
Bowes, J. L. and Bros., 678
Bradstreets, reports of, 106
Brassey, Sir Thomas, on exports, 35; on Indian wages, 227; on labor and wage fund, 291
"Breitman, Hans," 20
Bremen Line of steamers, 657
Brewster and Co., 313, 314
Bright, John, on protection and demands of labor, 608
British Board of Trade Returns, 679
British Parliaments, select committee on scientific instruction, 596
Broderick, on price, 117, 118, 251,
Brougham, Mr. Henry (Lord), 642, 643
Brownlow, Earl of, 270
Brugsch, Dr., 334. 453
Buckle, 10
Bulletin of National Association of Wool Manufacturers, 678
Bureau of Labor, 314
Burke, Edmund, 227
Burlingame, Anson, 535, 548, 549
Butler ("Hudibras"), 441
Byles, Judge, 558

C.

Cæsar, Augustus, 454, 466
Cæsar, Julius, 454
Cain, 603, 645, 668
Caird, Sir James, on corn in England, 120
Cairnes, J. E., definition of value, 80; share of capital, 180; on labor, 290, 291; on wage fund, 292, 294; on protection, 556
Calhoun, John C., 38; on representation of capital and numbers, 413, 415, 629
Cambridge University, 620
Camden & Amboy Railroad and Transportation Co., 154
Campbell, Chancellor, on land tenure, 52
Canadian Manufacturer, 581
Carey, Henry C., 3; definition of political economy, 5 id.; corrective influence, 11, 16; definition of wealth, 42; criticised, 43–45; relation of wealth to civilization, 48; on value of land of Great Britain, 71; definition of value, 79, 80, 83, 91; on perishability of labor time, 92; on price, 96, 117; on population in United States, 145, 180; on decline of profits, 194, 195, 229; on security as cause of rent, 234, 245; on rent and fertility, 239, 247; on labor, 289; money, 330; on crises, 374, 383; cotton product, 397; on land values in India, 488; Carey *vs.* Bastiat, 507; on Prussia, 519; on soils, 570, 577, 674, 687, 705

Carey, Matthew, 514
Carlisle, Earl of, 270
Carroll, Charles, of Carrollton, on railways, 152
Carroll, P. C., 555
Cartwright, 681, 685
Cass, Lewis, 38
Cass farm, 269
Candor, Earl of, 270
Catholic Church, 53
Cavour, Count, 630
Central Pacific Railroad Co., 157
Census of 1860 in United States, 254; of England, 272; of United States, 312, 313
Cernuschi, 373
Chalmers, Thomas, 330
Charles I., 341; execution of, 42; effects, 407
Charles II., 340, 342
Charles V., 669
Chase, Salmon P., 38, 221, 386
Chalmers, Mr., on local taxation and government, 477, 478; on price, 96
Chambers' Encyclopœdia, 481; on shoddy, 567, 672
Chang Kien, Emperor of China, 276
Chase, Secretary S. P., 114
Chen Ming, Emperor of China, 276
Cheney farm, 269
Cherbuliez, on value, 80
Cheeseman, Oscar, importer, on prices, 621
Chevalier, M., 503, 510
Chicago Board of Trade, 106, 108
"Chicago Tribune," the, on Canadian share in paying American duties, 593
Choate, Rufus, 38
Chow-King, 668
Chow-tin-jin, 538
Chrysostom, on community of goods, 52
Clare, Lord, on Ireland, 492
Clark, of Greenbush, 632
Clark, jr., & Co., John, foreign manufacturers, 604
Clay, Henry, 38; compromise of 1832–3, 384, 577, 629, 652
Clemens, on community of goods, 52.
Cleveland, Duke of, 270
Cleveland, Grover, 423
Clinton, DeWitt, 38; on canals, 150, 151
Clive, Robert, Lord, 227
Cobden Club, essay on land tenure, 52; motto, 628
Cobden, Richard, 155; on Chinese tariff, 533; on Chinese war, 536; on free-trade class interest, 604; on wages, 604; his treaty with France, 636, 657
Codman, Captain, 662
Colbert, 501, 510, 577; on glass, 639, 673, 674
Colburn, Chancellor of Exchequer, 657
Colley, Col. Prof., 430
Collins, E. K., 657
Collins Line, 657
Colwell, Stephen, 16
Colton, Calvin, definition of political economy, 3
"Commercial Bulletin" of Boston, 600
Commission of Parliament on decline of silk manufacture, 636, 637
Committee on Contract Packets, 657
Commons, report of Select Committee on Instruction to House of, 596
Comte, August, classification of sciences, 6
Columbus, Christopher, 24, 189
Committee on Manufactures, report of, 605
Condillac, 82
Confucius, 550
Congress, Committee on Manufactures, 605
Congreve & Son, steel importing agents, 604
Constantine, 455
Constitution of United States, on money, 330; election of President, 416, 426, 428; on export duties, 460
Consular reports, 499, 523, 525
"Contemporary Review," 66
Cooke, Jay, 157, 391
Cooper, Peter, 190
Copernicus, 323
Cordier, on cost of wars, 70
Corn Exchange of Montreal, 665
Cortez in Mexico, 50, 331, 631
Cotton Circular (Liverpool), 664

Cournot, on market, 100
Cossa, Luigi, 24
Craig, Isaac, 639
Cranston, Eliza, 425
Crompton, 681
Cromwell, Oliver, 340, 426
Cunard, 657, 658, 662
Cunard Company, 662.
Cyclopedia of Political Economy, American, 330

D.

Dalrymple, farm of, 270
Darien Canal Co., 371
Darwin, Charles, 487
Davenant, Dr., on price, 95, 115
Davenport & Bro., importers, on prices, 621
Davis, John Francis, 539
De Candolle, origins of plants, 275-280
De Fontenay—on rent, 242
De Guignes, 538
De La Fayette, 514
Delaware and Raritan Canal Co., 154
Delano, C., 669
Democratic federation in England, 272
De Parien, 453
Department of Agriculture, United States, 252, 256
Derby, Earl of, land, 270; on national debts, 448
De Tocqueville—on American opinion, 425
Descartes, 571
Devas, C. S., on condition of political economy, 9; on Mercantile School, 19; on labor, 282, 330, 331; on protection, 556; on navigation laws, 557; on protection, 568, 569, 570, 574
Devonshire, Earl of, land, 270
"Deux Mondes, La Revue des," 528
Digby, William, on famines in India, 485
Dillon, Mr., 9
Diomede, 334
Diodorus, 50
Dio Cassius, 50
Dixon, W. Hepworth, on Russia, 526
Dodge, J. R., 256, 262, 265
Dominion Board of Trade, 665
Dorsey, E. B., 29; on railway earnings, 174
Douglas, S. A., 38
Downs, F. C., on famines in India, 485
Duhring, Dr., 16
Dupin, on cost of wars, 70
Dutcher, Josiah, plow, 264
Dutcher, W. & G., manufacturers, Sheffield, Eng., 605

E.

East India Company, 490, 670
Eckhardt, J., 528
Edison, T. A., 189
Edward III., 340, 669
Edward IV., 340, 341
Edward VI., 340, 341
Eichbaum—glass-cutter, 641
Elder, Dr. William, definition of political economy, 3
Elder, Cyrus, on labor, 284, 286, 323, 324
Elgin, Lord, 534, 553
Elizabeth, statutes concerning labor, 303
Elliott, Captain, 534
Encyclopædia Britannica—on corn laws, 119; on distribution of land, 138, 139; corn law repeal, 376; cost of armies, 438; on Chinese and opium war, 534
Encyclopædia, Chambers', 481; on shoddy, 567
Engineers, Brotherhood of Locomotive, 510
England, Bank of, 336
England, census of, 272
Erie Railway Co., 156
Esau, 308
Etheridge, Emerson, 38

F.

Fancher, H., 482
Farley on Turkey, 489, 490
Fawcett, Henry, definition of political economy, 3; id., 5; a fallacy, 26; definition of wealth, 42; criticised, 45; absence of wealth in savage nations, 48; rent, 243; id., 245; local taxes in England, 477; on protection, 556
Fawcett, W. L., on debt and prices, 392, 450

Fayette, De La, 514
"Federalist," The, 409, 418
Ferrara, 16
Field, Cyrus W., 189
Field, Marshall, on prices, 623
Fontenay, M. de—on position (location) and rent, 242
Fourier, 75; law of variety, 94
Fox, C. J., 408
Franklin, Benjamin, 24, 78, 632, 647
Frederick the Great and beet sugar, 503
Freeman, Prof. E. A., 408; on Turkish people, 489
Free Trade League, 604; run by importers, 604, 662
French and Hawkins (harvester), 264
France, Academy of, 466
Fulton, Robert, 24

G.

Gallatin, Secretary, 38, 640
Gambetta, M., 503
Gardner, Mr., M.P., on Irish duties, 492
Garfield, President, 38; vote for, 423; on protection, 599
Garibaldi, Giuseppe, 630
General Court of Mass., on glass manufacture, 639
Genovesi on value, 82
George, Henry, definition of political economy, 3; of wealth, 43; his land doctrine, 125–130; on title, 186; on poverty in cities, 219; confiscation scheme, 243, 268
George II., King—writ of execution for debt, 144; statutes concerning labor, 303
George III., King—influence of on constitution of England, 133; statutes concerning labor, 303; coinage under, 341, 342; view of prerogative, 408; tax, 466
Girard, Stephen, 202
Gibbon, 454, 550
Giffin, 272, 273, 392
Gladstone, W. E., 36, 484; on Ireland, 492, 493, 643
Glaucus, 334
Glenn, Dr., farm of, 270
Godard, 189
Godin, M., 313
"Golden Fleece," the, 669
Goldziher, 645, 668
Goodyear, 189, 325
Goschen, Rt. Hon. Geo. J., 392, 459, 467; on local taxation, 477, 478
Gossen, Hermann H., his theory of value, 94
Gott, Mr., 681
Gough, Sir Hugh, 534
Great Britain, census of, 272; customs and excise, 482
Grand Trunk Railway Co., 156
Grandin, farm of, 270
Grant, Gen. U. S., 373
Grant, Sir Hope, 534
Great Western Railway Co. of Canada, 156
Great Western Steamship Co., 657.
Greeley, Horace, 6, 373, 464, 503; on beet sugar, 504–506; on resumption, 529
Gresham, Sir Thomas, his law as to adulterate coinage export, 368
Grünlund—on abstinence, 74; division of earnings, 176, on slavery and progress, 212; on "fleecings," 303, 304, 308
Guizot, on representative government, 408, 409; on Roman tributes, 454, 503

H.

Hallett, Major, experiments in thin planting, 231
Hale, Senator, 38
Hallam, on House of Commons, 409
Hamilton, Alexander, 38; on cause of rent, 241; coinage, 337; Bank of United States, 351; on government, 409, 410, 414, 418, 577; on glass, 639, 640; fruits of tariff, 641
Hamilton Manufacturing Society, 640
Hancock, Gen. W. S., 423
Hansard's Debates, 657
Hardware, sanitary, nine firms on prices of, 621
Hargreaves, 681, 684
Harris, Townsend, 553
Harrold, F. W., hardware, Birmingham, 605

Harmon, L., 310
Haskell (Moore &), reaper, 264
Hastings, Warren, 227
Havre Line of steamers, 657
Hawkins (French &), harvester, 264
Hayes, John L., 668, 669, 670, 672, 678
Hearn—Plutology, 163
Heaton, J. Henneker, M.P., 658
Herod, 704
Heeren, 139
Hegel, 15
Hegewisch, 139
Helmuth, Schwartze & Co.'s Circular, 680
Heyne, Prof., 139
Herodotus on land, 138
Helper, Hinton R., 33
Henfrey, H. W., on English coins, 342, 349
Henry, Prof., on exhaustion of soils, 253
Henry III., King of England, 334
Henry V., House of Commons under, 409
Henry VII., 340; VIII., 340, 341
Hewitt, Abram S., 511, 573
Hobbes—quoted by Adam Smith, 43; on state, 132
Homer, 61, 278, 333, 334, 645
Hood, Thomas, 4
Horton, S. Dana, 15; coinage and standard, 341, 342, 343, 349, 362
House, E. H., 553, 554
House of Commons of Ireland, address of, 492
Hough, Dr. Franklin B., 148
Hudson, Hendrik, 189
Hudson, James T., 268
Humboldt, 278
Hume, on value, 82; on money, 330, 358
Huskisson, Rt. Hon. William, 638, 655
Hussey, Obed. (harvester), 264
Hyndman, on food in England, 120; on earnings, 273

I.

Illinois, railway commissioners of, 173, 311
Illinois Central R. R. Co., 157
Ingersoll, Robert G., on avarice, 205, 305
Insurance, New York Chamber of, 295
"International Review," 538
Ireland, address of House of Commons of, on Union, 492
"Iron Age," 448
Iron-makers, Western Association of, 581
Iron and Steel Association (American), 558; on prices of American and English iron and steel wares, 590
Irving, William, importing agent, 605
Isocrates, 50

J.

Jackson, Andrew, 38; strong executive influence of, 133; on Bank of United States, 351; on foreign trade and American labor, 381; compromise tariff, 384, 629, 642
Jacob and Esau, 309
Jacquard, 674
James (Apostle), on community of goods, 52
James I., 340, 631, 634
James II., 407, 426
Jefferson, Thomas, 38; on navigation and manufactures, 598; on equilibrium of industries, 598, 629, 640, 641
Jessup & Sons, Wm., steel, Sheffield, Eng., 604
Jevons, W. S., 5, 9, 17; how economics might be made an exact science, 34; definition of political economy, 43; definition of value, 80; value not due to labor, 83; or demand, 92; on Gossen's theory of value, 94; on utility, fluctuations of, 95, 96; on value as affected by labor, 98; to lower it, 99; defines a market, 100, 101; on rent, 243; defines labor, 289; on labor combinations, 302, 303; defines money, 330, 369, 381; petulance in discussing protection, 556–558, 560, 571, 572
Job, 59, 444
Journal of the Society of Arts, 485
Justinian, 547

K.

Karamsin, Tooke and Segun, on Russia, 528
Ke Shen, Commissioner (Chinese opium war), 534
Kea-King, 540
Keay, J. Seymour, on India, 455, 484; salt tax in India, 487
Keen Lung, Emperor of China, 547
Keene—broker's deal in wheat, 105
Kelley, editor of Karamsin, Tooke and Segun, on Russia, 528
Kelley, Hon. William D., 38
Kendall, Thompson I., 270
Kent, William, 650, 651, 652
Kepler, 24
Kerr, Mr., 641
King, Gregory, on price, 95, 115, 372
Kinnear, Mr. Boyd, on corn in England, 120
Knight, History of England, 555
Knights of Labor, 310
Knox, Gen. Henry, 153
Kolb, condition of nations, 26, 28, 30, 31, 251, 476, 478, 496, 529, 537
Kossuth, Louis, 630
Kon-fut-si, 550

L.

La Fayette, 514
Labor Bureau of Massachusetts, 314, 581
Lalor, J. J., 569
Lamb, Charles, 357
Lane, Samuel (thresher), 264
La-ot-zi, 550
Lassalle, 88
Lauderdale, Lord, on proportion of demand, 92
La Vasseur, on value, 80
Laughlin, Prof. J. L., 337, 353, 366, 381.
Lawes, Sir John, on corn in England, 120
Leconfield, Lord, land of, 270
Le Devoir, 313
Le Play, 331
Leicester, Lord, on corn in England, 120
Leiper, Thomas, 598
Levi, Leoni, 272
Lincoln, Governor of Massachusetts, 153
Lin, commissioner (China), 534
Lincoln, Abraham, 38, 577
List, Frederick, 16; his work in Germany, 514; mining investment in Pennsylvania, 515
Liverpool, Lord, 16, 361
Locke on value, 80; on rent and interest, 241
Lockwood, Henry C., 268
Londesborough, Lord, land of, 270
"London Academy," 490
"London Times," 596, 598, 658
Long, 16
Lonsdale, Earl of, 270
Louis XIV., reign of, 639, 641, 673
Louis XVI., 674
Lubbock, Sir John, 46
Lycurgus, 50, 138

M.

Macdonald, Sir John A., 531, 664
Macphelah, 333
MacLeod, H. D., 3; definition of political economy, 7; id., 6, 9, 16; on value, source of, 80; on value, 83, 88; on share of capital, 180; on rate of profit, 191, 192; rent, 241; on rent in new and old communities, 241; on rent, 243; defines labor, 289, 333; coin circulates on credit, 344; currency, 393, 448, 451.
McCulloch, J. R., 5, 6; on value, 80; on decline of cultivation of breadstuffs after repeal of protection, 120; on profit, 168; agricultural product of England, 177; rent and fertility, 238, 239; on labor, 282; defines labor, 289; wage fund, 293; on labor combinations, 302, 373; on crises, 374, 376, 377, 394; on tobacco tax, 481; on China, 538; on dependence on foreigners, 570: on decline of silk manufacture, 637
McCulloch, Secretary, Hugh, 392
McCormick, Cyrus H., (reaper) 264
Madison, James, 38, 629, 641, 642, 655

Madras civil service, member of on labor in India, 487
Magna Charta, 59
Mallock, W. H., on earnings of British people, 176; on land-holding in England, 372; incomes, 273, 274
Mallory, Rollin R., 38
Malte Brun on China, 538
Malthus, 16, 199, 230; law of population, 292, 295, 307
Manu, Institutes of, 452
Margraff and sugar, 503
Marigny, 453
Mariner, 50
Marsh, George P., 43
Marshall, Chief Justice, influence of on constitution of United States, 133
Martin, R. Montgomery, 538–540, 541, 547
Martineau, Miss Harriet, 372, 374, 389
Marx, Karl, 5; definition of value, 80; theory of value criticised, 88, 91; relation of to Smith and Ricardo, 88; theory of value not sustained by market reports, 101; share of wages, 184; on surplus value in labor, 188; on machinery 209, 415
Mary, Queen of England, 340; House of Commons, under, 409
Mason, David H., 628; on salt, 696
Massachusetts Labor Bureau, 314, 581
May, John, 670
Maximilian, 450
Mazzini, 577, 630
Medhurst, Dr., on China, 540, 547
Medill, Joseph, 593
Meggins, on drain of silver, 345, 373
Messageries Maritimes, 658
Metropolitan Museum of New York, 334
Michigan Central Railroad Company, 156
Mill, John Stuart, definition of political economy, 2; metaphysical method, 9, 10, 13; theory of international values, 15, 16, 17, 18, 23; definition of political economy, 43; on value, 83; theory of value not sustained by market news ever, 101, 180; on socialism, 185, 186; on decline of profits, 194; error, 195, 199, 200; rent and fertility, 238; monopoly and rent, 241, 247; theory of rent, 243; transportation affects rents, how, 247; on labor, 282, 289; on wage fund, 290, 292, 330, 459, 460; on protection and revenue, 469, 470; on protection, 556, 571, 587, 623, 634, 696
Million, the, 320
Milton, on India, 69
Minerva, 334
Mint at Bombay, 331; at Washington, 338
Miscellaneous statistics of Great Britain, 32
Mitchell, S. Aug., 552
Moffat, Robert Scott, 558, 566
Mongredien, on corn laws and price, 112
Moody, land and labor, 157; on circulating capital, 198; on bonanza farming, 219, 264; on inventions, 264, 265; tone of book, 268; on great land-holdings in United States, 270
Moore and Haskell (reaper), 264
Morey—on Roman law, 130
Morrill, tariff, 470
Morrison, Dr., 540
Morse, Prof., 189, 325
Mulhall, 36, 178, 273
Mun—on foreign trade, 65
Museum, Asiatic, 334; Metropolitan of New York, 334

N.

Napoleon I.—On Say, effect of wars on capital, 211, 361, 436, 503, 504, 510, 577, 630, 674
Nebuchadnezzar, 334
Nero, 667
Newbold, Charles, first cast-iron plough, 264
New England Crown Glass Co., 643
New England Glass Co., 641
New Jersey Railroad and Transportation Co., 154
"New Princeton Review," 553
New York Central Railroad Co., 155

"New York Tribune" on funds of Free Trade League, 604
Newton, Sir Isaac, 215, 571
Nicholas, Czar, 527
Niebuhr, 139
Nimmo, James, jr., Statistician Department of Agriculture, 106; railway freights, 221
"Nineteenth Century," 484, 487.
North, Edward P., 657
North, Lord, 408
"North American Review," 657
Northumberland, Duke of, 270
Northern Pacific Railway Co., 157
Nott and Gliddon, 33
Nourse, Joel (plow), 264

O.

Oberhampf, 674
O'Hara, Gen. James, 577, 578. 639, 640
Ohio Agricultural Report on wheat products, 254
Old Testament, 453
Oriental and Levant Trading Co., 490
Ossian—enduring quality of high art, 73
Overend, Gurney & Co., in crisis of 1865, 389

P.

Paris Monetary Conference, 336
Parliament Committee on Decline of Silk Manufacture, 636, 637
Parliament Committee on Contract Packets, 657
Parliamentary debates, 555; Hansard, 657
Pascalis, Dr. Felix, 632
Patent office, 264
Patroclus, 334
Patterson, R. H., crisis of 1865 in England, 389
Patterson, William T., secretary of Dominion Board of Trade, 665
Paul (St.), on community of goods, 52
Paul, inventor of roller spinner, 681
Peacedale woolen manufactory, 313
Peel, Sir Robert, 16, 638
Pell, Read and, on American Agriculture, 250
Pennsylvania Wool Growers' Association, 680
Pennsylvania Railroad Co., 156
Pericles, 547
Perry, A. L., 56; rejects "wealth," 43; defines value, 80; on labor, 282, 557; his free-trade methods, 571,—603, 584, 587, 589, 591, 592, 594, 595, 599, 600,
Perry, Commodore, 553
Peter the Great, 527
Phelps, Dr., 153
Phillips, Wendell, on moral import of good wages, 583
Pillsbury Flour Mills, 313, 314
Pitt, William, 408, 410
Pizarro, 331
Plato, Republic, 131
Pliny, 278, 669
Plowden's Review on Ireland, 492, 493
Plumbing, nine firms dealing in, 621
Plunkett, Lord, on Ireland, 492
Plutarch, 50, 138
Political Economy, Cyclopædia of, 330
"Political Science Quarterly," 465
Polo, Marco, 545
Pope, Alexander, 404
Poor, Henry V., Railway Manual, 145, 157
Pope, Alexander, 404
Porter, Robert P., on silk, 632, 635, 636, 685
Portland, Duke of, land, 270
Pottinger, Sir Henry, 534
Powis, Earl of, 270
Prendruft, Gen., on India, 485
Press, New York, 466
Price, Bonamy, 9, 17; on Malthus' law of population, 230; on rent, 243; his unconscious humor, 292; on crises, 378, 379; on protection, 556, 557; on Mill's infidelity to free trade, 557, 558; on agricultural hierarchy, 559
Price, Mr., of Pittsburgh, address, 448

Q.

"Quarterly Review," 331

"Political Science Quarterly," 465
Quetelet, A., on crime, 441, 444, 445

R.

Railway Commissioners' Report of, of Illinois, 173, 311
Rae, John—produce of England, 177
Raikes, Postmaster-General of England, 658
Read and Pell—report of, on American Agriculture, 250
Reavis, L. U., 608
Redfield, H. T., on ratio of homicides to population, 34
Reed's History of Sugar, 505
Repealer's Manual, Battersley's, 493
Report—of Reed and Pell, 250; Mass. Labor Bureau, 314; Paris Monetary Conference, 336; Treasury, 388; on local taxes in England, 477; of Parliament select committee on scientific instruction, 596; of committee of Congress on manufactures, 605; of committee on packets, 657; of committee on salt, 694
Revenue Reform Club of Brooklyn, 590
Reviews—Quarterly, 331; Plowden's, 491, 493; Annales de Chimie, 503; Revue des Deux Mondes, 528; International, 538
Ricardo, David, 4; definition of political economy, 5, 9; his method, 16; on value, 80; no absolute standard of value, 83; relation to Karl Marx's socialism, 88, 91; on wages, 170, 180; iron law, 185, 199; rent and fertility, 238, 239, 240; theory of rent, 243; Carey criticises Ricardo, 247; on labor's price, 289, 579, 645
Richard Cœur de Lion, 646.
Ritter—as cited by Roscher, 50, 53
Roberts, Ellis H., on revenue, 453
Robertson—community of goods among Aztecs, 50
Rochefort, 50
Roederer, 22
Roebuck, Mr., 408
Rogers, J. Thorold—as to rates of wages, 166; on protection, 453, 556, 657
Roscher, 2; definition of political economy, 4, 22; definition of wealth, 42, 43; on community of goods, 49, 50, 51, 52, 53; on economic labor, 64; definition of value, 80; on farm profit, 178, 189; on rent, 240, 241; on labor, 288; on money, 330, 569; on protection as steadying prices, 570
Rosconi, Count, 336
Rothschild, Baron A de, on gold and silver, 364
Rutland, Duke of, land, 270

S.

S'âkyamuni, 550
Saladin the Saracen, 646
Salem, town of (Mass.), on glass, 639
Salisbury, Marquis of, on free trade, 555, 557
Salt, Committee on, 694
Sampson & Bros., importers, 605
Sands & Co., A. B., importers, 604
Sands, Mahlon, secretary Free Trade League, 604
Say, J. B., 8, 9, 82, 503, 514
Say, Leon, 503
Schieffelin, William, importer, 605
Schiller, 48
Schliemann, Dr. 645
Scientific instruction, report of committee on American manufactures, 596
Scott, Sir Walter, 284, 646
Scrivenor—History Iron Trade, 648
Segun, Karamsin and Tooke on Russia, 528
Senate Finance Committee's compilation, 644, 648
Senior, on law of value, 94; on farm profits, 178
Sesostris, 437, 447
Seward, W. H. 38
Seward, Minister, 550
Shadwell, J. L.,-on mercantile school, 18; on effect of repeal of corn laws on prices, 118, 334;

on tobacco tax in England, 480; on spirits, 482
Shakspeare, 166, 400, 444
Shearman, Thomas G., 611, 612
Shelburne, Lord, ministry, 408
Sheridan, Richard Brinsley, 227
Sidgwick, Prof. Henry, 15, 16; definition of political economy, 43; on wealth, 46; definition of value of credit, 67; on the two forms of wealth, 92; agreement with Jevons and Gossen, 94; on wealth, 205; on rent, 243; on money, 329; on protection, 557, 561, 562, 563, 566, 594; on import duties, 620, 664
Siemens, 189
Sismondi, 330
Smith, Dr. Adam, 2; Definition of political economy, 5, 7; of wealth, 42, 43; absence of in savage life, 48; Definition of value as due to labor, 79, 80; as cited by Mc Leod on value, 82; on value, 82; criticised, 83, 85, 87; relation to Socialism, 88; theory of value opposed by Jevons, 99; in conflict with current market reports, 101; on division of labor, 136; his theory of wages, 166, 170; on agricultural rent, 178; on sharing between capital and labor, 179; on interest, 180; on rate of profit, 192; on farm profit, 192, 193; on labor, 199, 200; on division of labor, 219; on retinue of servants, 225; on wages in American colonies, 227; on rent, 238; definition of labor vague, 282, 288; on wages, 295, 298; on labor in China, 298; in London, 299, 323; on money, 345; relative value of gold and silver, 345, 356, 373; on taxes, 457–460, 467, 474; on France and protection in, 500, 503, 544; on protection, 555, 556, 570, 572
Smith, Gideon B (silk), 632
Smith, Samuel, on India, 66
Smithsonian Institution, 253
Society for Establishment of Useful Manufactures, 640
Soetbeer, Prof., 363, 366, 367
Solomon, 704
Southern Pacific Co., 158
Spear & Jackson, steel saws, Sheffield, Eng., 605
Spencer, Herbert, 136
Spinner, General, 669
Springer, Hon. William, of Illinois, 25, 682
Stanhope, Lord, 555
Stanley, Henry M., contract with his men, 165; natives on Congo, 333, 703
Statistical account of British Empire, 177
Staunton, Sir G., 538, 539
Stephen, Leslie, 17
Stevens, Thaddeus, 38
Stewart, A. T., 181, 195, 215, 226, 292
Stewart, Hon. William, 38
Stewart, definition of political economy, 7
Streator, tr. of Kolb (see *Kolb*)
Strabo on community of goods among the Scythians, 50
Sullivan, A. M., 274
Sullivan, Sir Ed., 558
Sumner, Hon. Charles, 38
Sumner, Prof. William G., 21
Supreme Court of the United States, 141
Swank, James M., 645, 647, 648, 649, 650

T.

Tariff, Senate Finance Committee, compilation of, 644, 648
"The Academy," 490
The American News Co., 604
"The Chicago Tribune," 593
"The Commercial Bulletin," 600
"The Federalist," 409
"The Free Trade League," 604
"The London Times," 596
"The Million," 320
The Mint at Bombay, 331
"The People's Pictorial Taxpayer," 604
"The Tribune," New York, 529, 604
"The Textile Record," 635
Thiers, 503, 510, 577, 674
Thomas, Philip E., first railway in the United States, 150
Thompson & Kendall, farm of, 270
Thornton, Mr., 15, 16; on price, 96; on labor, 292

Thucydides, on division of land, 138
"Times," London, on American iron and steel, 596
Toledo Steel Works, Sheffield, England, 604
Tooke, on price, 96, 113, 115, 116, 117, 389
Tooke—Karamsin, T., and Segun on Russia, 528
Toombs, Senator Robert, 30, 657
Torrens, on profit, 178; on wages, 185
"Tribune," The, of New York, 529, 604
Tubal Cain, 645
Turgot, 501, 503

U.

Union Pacific Railroad Co., 157
United States—department of agriculture, 252, 256; money, 330; treasury certificates, 335; mint, 338; debt, 354; treasury reports on prices, 387; systems of taxation, 468; customs compared with Great Britain, 482; consular reports, 499, 506, 523
University of Cambridge, 620

V.

Van Wart and McCoy, New York, agents, 605
Van Wart, Son & Co., Birmingham, 605
Vanderbilt, C., 189, 217, 220, 226, 305, 397
Vedas of India, 668
Victoria, Queen, influence of on government, 410, statute of 13 Vict. on tobacco tax, 480
Victor Emmanuel, 439
Villard, Henry, 157
Vogeler, Consul-general, report on sugar, 506
Von Beust, Baron, 577, 630
Von Robais, 673

W.

Wade, John, 555
Wagner, Boehm &, 548
Walker, Amasa, 6
Walker, F. A., on value, 80; on wages and profits, 294; money, 329, 359, 364
Walker, Robert J., 388, 553; tariff of 1846, 388
Ward, Lester F., 664
Watt, 24
Wayland, Dr. Francis, 330, 504, 595
Webster, Daniel, 38, 153, 413, 577, 669
Washington, George, 38; as to canals, 140–141, 629
Warner, Consul, 523
"Wealth," a New York financial journal, 43
Wells, David A., 438; on undervaluation, 605; tonnage taxes, 654, 666
Wenck, on Roman tributes, 454
Western Association of Ironmakers, 581
Western Pacific Co., 158
Whateley, Archbishop, 9, 82
White, Horace, 330
Whitney, Eli, 686
William III., coinage under, 342, 407, 409; on woolen manufacture, 491, 670, 671
William and Mary—coinage, 342; on wool, 670
William IV., act of, 481
William, Emperor of Germany, 516, 524, 630
Williams, Monier, 331
Williams, S. Wells, 540
Willoughby, Lady, land, 270
"Wilmington *Morning Star*," 698
Wilson, Mr., 658
Wingate, Sir George, 466
Wood, Martin, 485
Wool Growers' Association, 680
Wool Manufacturers' Association, on prices of wool, 680
Wright, Silas, 38
Wright, Carroll D., 39
Wolowski, M. L., on moral influence of wealth, 49, 78, 528
Wood, Jethro, (plow) 264
Wrangell, 50
Wu-ti, emperor, 276
Wynn, Sir W. W., 270

Y.

Yarborough, Earl of, 270
Yi Shon, Commissioner, 531
Young, Arthur, 177, 178
Young, Dr. Ed., 391

Z.

Zend-avesta, 668

See "General Index" at end of volume.

PRINCIPLES OF

ECONOMIC PHILOSOPHY.

CHAPTER I.

SCOPE AND METHOD.

1. Definitions.—Philosophy is, in its root-ideas, the love or pursuit of wisdom. In modern usage it is the body of principles which give logical coherency and harmony to science, as distinguished from the body of facts constituting the science or branch of knowledge from which the principles are deduced. An economic philosophy would consist of the logical, coherent and harmonious body of principles which had been deduced from a sufficient observation, collation and comparison of economic facts.

The body of economic facts would be, if systematically arranged and classified, the science. The body of principles which give logical coherency and harmony to these facts, would be the philosophy. The application of these principles and facts to any economic purpose would be the art or practice of economy. Economy consists in getting away from poverty and toward wealth, whether it is attained by diminution of expenditure or increased production. It may occur to an individual, to society, or to the state.

The term Political Economy has been applied indifferently to the science, the philosophy and the art of economy, whether as practiced by individuals, by society, or by the state.

It has the convenience which arises from its capacity to take on several meanings. As most of these meanings will in turn form the topic of this treatise, it would be in no way improper to be content with the general name, Political Economy. As that name, by reason of the many uses to which it has been put, has

ceased to be a precise designation of doctrine, it is thought proper to say that among the various works which are offered to the public on Political Economy, the present aims particularly to present the outlines of the economic philosophy of existing society, industry and government.

In the presentation of this philosophy in its outlines, so many facts are necessary, that to many readers it may seem more scientific than philosophical—more an array of facts than a study of principles.

If, however, this book successfully explains society to itself, vindicating its economic methods at the bar of its conscience, then it is conceived its scientific quality is subordinate to its philosophic—its facts are less important than its sociodocy. If it helps man to know himself, in his three relations, as a unit of society, as a worker in business, and as a citizen of the state, its moral aim rises far above its scientific; yet this difference of aim does not alter the fact that the field in which our discussions lie is identical with that which has so long and by so many been designated "Political Economy" that it would be an unavailing affectation to attempt to change the name.

Political Economy treats of the duties of the Government to the people as respects their social well-being, and of the natural laws, principles and truths which apply to society as an organization that subsists by material means, growing if they are supplied and dying if they are withheld.*

---

* *Aristotle* ("Politics and Economics," Bohn's Class. Lib., p. 1), defined politics as the study of the highest possible and most excellent end and aim of the perfect city or state.

He said (Id. 289): "It is the province of political science to constitute a city from the very first, and when constituted to turn it to a proper use." But a city "is such a collection of houses, land and wealth as brings about an independent and happy life." (*Id.*) "As these are the essence for which men combine into a city or state, evidently economics are prior to politics in the order of nature."

Adam Smith defined political economy only in his title, viz.: "An inquiry into the nature and causes of the wealth of nations."

Roscher (vol. 1, p. 87, "Polit. Econ. by Lalor"), says: "By the science of national or political economy we understand the science which has to do with the laws of the development of the economy of a nation, or with its economic national life. Like all the political sciences, or sciences of national life, it is concerned on the one hand with the consideration of the individual man, and on the other it extends its investigations to the whole of human kind."

John Stuart Mill says: "Writers on political economy profess to teach, or to investigate, the nature of wealth, and the laws of its production and distribution; including, directly or remotely, the operation of all the causes by which the condition of mankind or of any society of human beings, in respect to this universal object of human desire, is made prosperous or the reverse."

The broadest law of being, of which every plant, animal and mind are alike illustrations, is that growth arises from an ability in the individual to assimilate nutrition in excess of its expenditure. This is equivalent to making a profit out of its environment. A person walking through a forest, which is a city of vegetation, where tree-life is forced against itself most compactly, observes that all but the outer and top limbs die for want of light. They can not make a profit out of their environment sufficient to supply their waste. The grass in the field, and the birds of the

---

Henry C. Carey says: "Social science, treating of man in his efforts for the maintenance and improvement of his condition, may be defined as being the science of the laws which govern man in his efforts to secure for himself the highest individuality, and the greatest power of association with his fellow men. . . . Man, the molecule of society, is the subject of social science. . . . Of all the departments of knowledge social science is the most concrete and special, the most dependent on the earlier and more abstract departments of science, the one in which the facts are the most difficult of collection and analysis, and therefore the last to obtain development. Of all, too, it is the only one that affects the interests of men, their feelings, passions, prejudices, and therefore the one in which it is most difficult to find men collecting facts with the sole view to deduce from them the knowledge they are calculated to afford."—*Soc. Sci. Cond., by McKean, pp.* 47, 37, 33.

Fawcett (Henry) says: "Political economy is concerned with those principles which regulate the production, the distribution, and the exchange of wealth."—*Manual of Pol. Econ., p.* 4.

Bastiat ("Harmonies of Political Economy," by Frederick Bastiat, by Stirling, p. 67), says: "The subject of political economy is man. But it does not embrace the whole range of human affairs. The science of morals has appropriated all that comes within the attractive regions of sympathy—the religious sentiment, paternal and maternal tenderness, filial piety, love, friendship, patriotism, charity, politeness. To political economy is left only the cold domain of personal interest. This is unjustly forgotten when economic science is reproached with wanting the charm and unction of morals. How can it be otherwise? Dispute its right to existence as a science, but don't force it to counterfeit what it is not and cannot be. If human transactions which have wealth for their object are vast enough, complicated enough, to afford materials for a special science, leave to it its own attractions, such as they are, and don't force it to speak of men's interests in the language of sentiment. . . . Take a lyre and chant such themes! As well might Lamartine sing his odes with the aid of the Logarithm tables!"

Henry George ("Progress and Poverty," Lovell's edition, p. 12), says: "This association of poverty with progress is the great enigma of our times. It is the central fact from which spring industrial, social and political difficulties that perplex the world, and with which statesmanship, and philanthropy, and education, grapple in vain. . . . It has not yet received a solution. It must be within the province of political economy to give such an answer."

Henry Dunning McLeod says "it is the science of exchanges or of values," thus omitting from it all relation to politics, nations or government.—*Principles of Econ. Phil., vol.* 1, *p.* 103.

Colton ("Public Economy," p. 26), says: "Political economy is the application of knowledge derived from experience to a given position, to given interests, and to given institutions of an independent state or nation, for the increase of public and private wealth."

Elder ("Conversations in Pol. Econ."), says it "is primarily occupied with the laws

air, the artist studying at his easel, and the banker in his directors' room, the sewing girl

> Sewing at once with a double thread
> A shroud as well as a shirt;

and even the charity or aid society that seeks to carry relief to the poor,* all live by this same law—of making income exceed expenditure. No coral insect can live without it and the Roman Empire could not get above it.

In affirming this unity of law between Economic Nature and Physical Nature, we do not affirm whether the life which thus adapts itself to its environment is the cause or the effect of the organism in which it acts. The materialist says that life is an effect of its organism. The supernaturalist says that the soul is of an origin above and anterior to physics, and is the immediate cause of the laws which, in the living organism, contrast with the laws which govern mere inanimate matter. Upon this issue the economist in no way pronounces, when he sets out with the statement that in economics as in physics there are living organisms, viz: the individual—society—the State—the world of States; that all these grow and decay in their economic aspect, and that the law of the growth of each is the same as in physics, viz: that it is dependent on the power of the individual to absorb more than it expends—to make income exceed waste.

Political economy is the study of the natural laws which govern the supply or exhaustion of the means whereby the organism called society grows, and of the reasons of its decline and dissolution.†

---

natural and social, which govern in the production and distribution of wealth in material things, with a constant outlook to the general welfare of society, so far as that welfare depends upon the necessaries, comforts and luxuries of physical life."

Ricardo says: "To determine the laws which regulate this distribution (of the whole produce of the earth, all that is derived from its surface by the united application of labor, machinery and capital, between the three classes of the community, namely, the proprietor of the land, the owner of the stock or capital necessary for its cultivation, and the laborers by whose industry it is cultivated), is the chief problem in political economy."—*Preface to Principles. Works, p.* 5.

* Recently in New York city, an Episcopal clergyman named Crowley was sent to the penitentiary as a swindler for purporting to run an orphan asylum without having the means to feed his orphans, being unsuccessful in begging them.

† *Roscher* says: "The public economy of a people has its origin simultaneously with the people. It is neither the invention of man nor the revelation of God. It is the natural product of the faculties and propensities which make man man. It grows with the nation, with the nation it blooms and ripens, and finally it declines with the people."—*Polit. Econ., Lalor*, 84.

2. Is Political Economy a Science.—Society is made up in part of principles of human nature which are lasting, and of manifestations, which change every hour. It combines much that is transitory with somewhat that is permanent. To nearly every economist his own system has the exactitude of demonstrable science and the conclusiveness of a final word. Yet it is but candor to admit, that as his work goes out to other economists, it is like a prisoner thrown into a den of lions. They dismember it, and its fragments appear in the next edition of their own works, contradicted and refuted by piecemeal, as having contained just enough nutrition to tempt them to apply to it the gastric juice of dissolving criticism. So Adam Smith is modified by Ricardo, Ricardo by McCulloch, and all by Mill, Carey, McLeod and Jevons. In this discord the true science of political economy seems a dissolving vision. Each will say there is a science, but when search is made we find the science of each consists largely of that which to others is only his errors. The usual notion of a science is of a body of truth, beginning with certain exact definitions which all men who give it their study will accept, proceeding thence to a system of classified facts, which cover a well-defined sphere of phenomena, and leading up generally to principles or generalizations, which are accepted as applying to all these facts. In this sense we cannot declare political economy a science save by first expelling from the temple of science all who dispute our definitions, our classifications of facts, or our principles. Yet they are sure to be modified even by our friends and disciples.

If we include as economists all men who attract attention and followers by their speculations concerning political economy, as politeness at the sacrifice of precision requires us to do, political economy becomes an incongruous babel of conflicting oracles. Not a solitary term in use can be harmoniously defined. One says wealth is a physical substance,* one that it is a mental condition,† another that it is a ratio between two quantities,‡ another that it is a difference in power between two attractions, another that it is undefinable.§ One defines labor as human time,‖ another as sacrifice,¶ another as productive force,** one so as to include the labor of a man,†† but not of a horse or engine, another so as to include beer or cider working in a barrel, or water falling on a mill-

*Fawcett, Manual, p. 6. † Viz., of power, capacity, and ability. Carey, Elder.

‡ McLeod. § Perry. ‖ Karl Marx. ¶ Adam Smith. ** McCulloch. †† Smith.

wheel.* To one credit is capital, and even coin is a species of credit.† To one money is coined gold or silver,‡ to another it extends to bank notes,§ to another to checks.¶ To one trade and commerce are one; to another they are opposites. To one value and utility are one; to another they are opposites. One says all production grows out of trade; another that all trade is a tax on production, and is itself unproductive. Certain economists, like Smith and Mill, enter on their work without defining many terms, assuming either that their meaning is too well known to admit of being made clearer, or too variable to admit of being fixed by definition. They use the terms in several distinct senses on every page, and yet rest their accuracy, in tangled and intricate processes of reasoning, on the success their readers may happen to have in attaching to these terms, in each of their varied uses, the same meaning which the writer attached to it in that use.

Some have taken refuge in a refusal to recognize any but some small knot of their own way of thinking as economists. But this is both narrow and uninstructive. It settles nothing. One says there is a science and it will shortly come. But he means "when others come to *agree with me. I now know.*" Another, "It is only a shifting combat in which the opposing forces are equal, but decline to acknowledge their equality." But this position, while it is favorable to investigation, is fatal to conviction, and at war with the singleness of truth. Whether political economy can justly be called a science, therefore, depends on whether the word science shall first be defined as a body of exact and accepted truth, or as a collection of studies, convictions and discussions concerning matters of which one man is permitted to see but a part, and another man another part, and which in all their relations summon together complications of which no man can see the whole. If the former view is adopted, political economy is not now a science and does not seem likely soon to be one. If the latter view is held, then political economy is the highest, most important, and most difficult to reduce to fixity, or certainty, of all the sciences.

The latter view has the sanction of August Comte, whose very profound classification of the sciences has found general favor among scientific men. He regards the sciences as standing in a complete logical order, beginning with mathematics, which involves the fewest elements and the most certainty, and proceed-

* McCulloch. † McLeod. ‡ Amasa Walker. § Perry. ¶ McLeod.

ing from thence through astronomy, physics, chemistry and physiology to sociology, which is the last, highest, and most complex of the sciences, involving the most elements and the least certitude. The logical feature in this order of the sciences consists in the fact that each successive science is made up of all the factors and elements involved in the preceding science, to which it adds one new element characteristic to itself, and each loses or parts with some of the certainty that belongs to the preceding sciences. Mathematics involves only the three elements of expansion, duration and number, or space, time, and quantity, and being absolutely simple is reducible to certainty, except in its very highest operations. Astronomy adds to these three elements that of motion. Physics supplies all the qualities of matter. Biology adds life.

Sociology combines man in society. What Comte here calls sociology, finds its introduction and first principles in political economy.

3. Political Economy also an Art.*—The practical aim of political economy is to fit its students to judge or predict with

* The earlier writers treat political economy more as an art. Stewart's "Inquiry into the Principles of Political Economy," published 1767, says: "The statesman is not master to establish what form of economy he pleases. . . . The great art, therefore, of political economy, is for it to adapt the different operations of it to the spirit, manners, habits and customs of the people, and afterwards to model these circumstances so as to be able to introduce a set of new and more useful institutions.

"The principal object of this science is to secure a certain fund of subsistence for all the inhabitants; to obviate every circumstance which may render it precarious; to provide everything necessary for supplying the wants of the society, and to employ the inhabitants (supposing them to be freemen) in such a manner as naturally to create reciprocal relations and dependencies between them, so as to make their several interests lead them to supply one another with their reciprocal wants. . . . Political economy in each country must necessarily be different. . . . It is the business of a statesman to judge of the expediency of different schemes of economy, and by degrees to model the minds of his subjects so as to allure them from the inducement of private interest to concur in the exeeution of his plan."

This at the present day would be called economic statesmanship rather than political economy.

Nine years later Adam Smith still defined political economy as an art. In the introduction to Book IV, he says: "Political economy proposes two distinct objects; first to provide a plentiful revenue or subsistence for the people, or more properly to enable them to provide such a subsistence or remedy for themselves." (The later Manchester school would have said "to leave them to provide such a subsistence for themselves or go without.") "And secondly, to supply the state or common weal with a revenue sufficient for the public service. It proposes to enrich both the people and the sovereign."

Under the full sway of the *laissez faire* school serious efforts were made to omit altogether the prefix "political" as savoring too much of government interference, and call the science "Plutology—the Science of Wealth," "Chrematistics," "The Art of Traffic," "Catallactics," etc.

greater accuracy the consequences which will ensue to the material welfare of the people from certain courses of governmental or social action. The art, of which political economy aims to present the scientific theory, is economic statesmanship. What the sum of knowledge concerning light is to the optician and photographer, that is the sum of knowledge concerning political economy or social science to the statesman and legislator. As the optician needs also to know the nature of glass, so the statesman needs also to know the nature of the people, and diplomacy, law, and many other things. But political economy should supply him with the true theories on which all legislation affecting economic interests should be framed. And right here we are met by the practical difficulty which makes the progress of political economy slower than would be expected from the great importance of the art to which it is an adjunct. In no other field of scientific effort have the rewards of the successful practice of the art, to which the science supplies the theory, been so great as to preclude a master of the art from becoming a teacher of the theory. None other than physicians and surgeons of tried practical skill would be thought fit to teach medical science. Only good practical lawyers and judges can teach law. Certainly no man would undertake to teach watch-making, or the management of a locomotive, who had never made a watch nor run an engine. Practical statesmen, however, have seldom been also educators, partly because college work devolves on scholarly men, to whom political strifes are distasteful, and partly since the honors and stress of a statesman's career leave him no leisure for less public duties. One could not reasonably ask a Pitt to retire from the cabinet, or a Hamilton from the treasury, to become an instructor of youth; and as to writers looking for profits to the sale of their works, it is more often those whose books promise a visionary millennium, than those which really instruct, that command a ready sale.

Napoleon I. expressed the antagonism between practical statesmanship and the theoretical economists of his time by his course toward J. B. Say, and by his famous and forcible saying "if an empire were made of adamant, the economists would grind it to powder." Say, in turn, held views which verged toward anarchy.

In England the more advanced economists acknowledge that political economy has fallen into odium because men not acquainted practically with either statesmanship, politics or industry, have sought to build up, on *a priori* reasoning, or by means of

such experience as is accessible to a man not in public life, a speculative and metaphysical body of theories concerning the effects of legislation upon business, as they appear to men who have never been engaged in either legislation or business. It is therefore the only attempt ever made to construct a science out of the criticisms of a body of men who have not practiced the art whose practice they assume to criticise.*

4. The Deductive—a priori—or Metaphysical Method.—The method of the *a priori*, deductive, or metaphysical school of writers on economics consists in treating it as a logic of human tendencies, a plexus or network of social probabilities deducible from what are assumed to be the well-known principles of human nature acting on large masses of men collectively. Mr. John Stuart Mill, David Ricardo, J. B. Say, and Archbishop Whately, are leading masters of this school. The style of these writers is usually the product of their assumption that political

---

*Prof. Bonamy Price of Oxford says ("Practical Political Economy," p. 7): "It is the authority of economical writers which is declining. This diminished weight is the result of their mode of treating the problems of the living world with which Political Economy deals. Men take a shorter and a far clearer path through their own observation than through the tangled jungle of scientific refinements."

Mr. C. S. Devas, an apostle of Catholic Ethics and of Sismondi, in a work full of learning and acuteness ("Groundwork of Economics") says: "It is time that something was done in England either to restore the declining credit of what is known as political economy, or to replace that enfeebled body of doctrine by a worthier successor." Our grandfathers exulted in political economy as a grand and beneficent science, not the least among the glories of their age; our fathers respected it; and little more than twenty years ago it successfully withstood all the sharpness of Mr. Ruskin's reasoning and raillery. But times have changed. There are men of intelligence who are beginning to suspect that much of this science is but a collection, partly of useless discussions and idle declamation, partly of truisms, partly of untruths; while the anarchy among recent economists on the very foundations and first principles of their science, as any one may see in Mr. Dillon's recent work on the "Dismal Science," is a matter not of suspicion, but of certainty.

Prof. Jevons says ("The Theory of Political Economy," Preface 1, vii): "When at length a true system of economics comes to be established, it will be seen that that able but wrong-headed man, David Ricardo, shunted the car of economic science on to a wrong line, a line, however, on which it was further urged toward confusion by his equally able and wrong-headed admirer, John Stuart Mill. . . . It will be a work of labor to pick up the fragments of a shattered science and to start anew, but it is a work from which they must not shrink who wish to see any advance of economic science."

Henry Dunning McLeod, discussing the Ricardo-Mill theory, that labor (and not demand) causes value, says: "Surely we have had enough of this Bedlamite rubbish, and it may be asked, why do we load our pages with it? Simply for this reason, that this idiotic stuff is the official political economy in England at the present day! This is what the candidates for the civil service of India are told to believe in as the perfection of human wisdom, and which is still taught and recommended in our universities. *Proh Pudor!*" ("Principles Econ. Phil." I., 653.)

economy is a branch of dialectics. It is marked on every page by the introductory phrase, "Let us suppose," "If it be assumed," "If we can imagine," "Let us now introduce," "It would then follow," "In some cases," "But suppose a lot of persons," "Suppose an event to occur," "They would in general then require," "From these considerations (hypotheses) it will appear," etc. We may see a truth in Mr. Buckle's statement that "all history is a history of tendencies." Though we might prefer to say that history gives the events, from which tendencies are inferred by philosophy. But assuming that tendencies are the chief events of history, it does not follow that the history even of tendencies can be written in sentences which begin with "Let us suppose."

Mr. Mill's work on this account omits, as either too laborious or unnecessary, any review or analysis historically of any event, or of the practical working of any economic theory, except as we may be willing to accept the fine workings of his own reasoning powers as being identical with the actual course of events. His nearest approach to descriptive statement consists in occasional quotations, chiefly from French and German writers of facts relating to the cottier, metayer, and peasant proprietary systems of land-holding, all introduced to illustrate his own impulsive *ad captandum* notions of how land ought to be held, rather than to present in logical sequence the modes and effects of existing systems. From the standpoint of an historical investigator his book is as void of facts, in their economic sequence as cause and effect, as Victor Hugo's "Toilers of the Sea," or Charles Dickens's "Tale of Two Cities." As an exercise in pure dialectics or the art of reasoning, it is, to a certain order of minds, as fascinating as Plato's "Dialogues." But we may come out of it without knowing whether the farmers of the United Kingdom did or did not, in consequence of the repeal of the corn laws, withdraw from cultivating grain on as much land as would, if put in grain tillage, have produced the quantity of grain imported; or whether the free importation of grain did or did not make bread cheaper or the prices of breadstuffs less fluctuating.

Not for the purpose here of controverting Mr. Mill, but simply of presenting the objections to the metaphysical or deductive method, we turn to his theory of international values.* He tells us there that "the values of commodities produced at the same

* "Political Economy," vol. 2, chap. xviii., p. 137.

place . . . depend . . . upon their cost of production." In the spaces marked by points, Mr. Mill had inserted two unmeasurable quantities to be deducted from his main proposition. These were: (1) "In places sufficiently adjacent for capital to move freely between them." (2) "Temporary fluctuations apart." Who knows what is a free movement of capital as distinguished from a constrained movement of capital? Who knows what places are sufficiently adjacent for a free movement of capital? If values of commodities depend on their cost of production, then the fluctuations in value must also depend on their cost of production. For of what worth would an explanation of values be which would not explain fluctuations in value? But if fluctuations in value depend on cost of production, then cost of production (of a single commodity) must itself be a fluctuating quantity. But this is absurd, for when a thing has been once produced the cost of production of that individual thing is fixed, and cannot change. The only element which can fluctuate is the cost of producing other things like it.* If Mr. Mill means by "cost of production" the cost of producing the individual thing to which the value attaches, then the value of every object would be fixed on the completion of it as a commodity, and there could be no fluctuations in value either temporary or permanent. If he means by cost of production the cost of producing other things essentially like the thing to which the value attaches, then values can vary with every new cost of production, and there is no ground for a distinction between permanent and temporary fluctuations.

Eliminating these elements of fog, let us see if we really grasp a tangible idea when we say that values of any kind or in any place, are fixed by their cost of production. Who can measure one single absolute cost of production in its entirety? The cost of production of my pen, when estimated absolutely as a cost to society, involves a cost of producing the gold from the mine, and the cost of producing the man who dug the gold, the implements with which he dug it, and the process by which the gold was separated, assayed, melted, and worked up. The cost of the handle involves the cost of cutting the tree from which it was taken, and of inventing and perfecting the ax with which it was cut, and the iron and steel manufacture which rendered it possible. Cost to an individual is measurable, because as to him the means

* This is styled by Mr. Carey "the cost of reproduction."

with which he works have a measurable money cost. But cost to society, in labor, is immeasurable, because the attempt to measure it involves a measurement of all the antecedent labor which culminated in it whether mediately or immediately. The cost to an individual has a beginning when he pays for certain raw materials. But society lives perpetually, works continually, and has no antecedent worker to furnish it with any raw materials. Each attempt to compute a cost of production to society goes back to the time when society began the labors leading up to it—

"When Adam delved and Eve spun."

Hence in referring us to cost, to society, of the production of the thing valued, as the source of the value of the commodity, Mr. Mill refers us to an immeasurable quantity.

He then proceeds to "suppose that ten yards of broadcloth cost in England as much labor as fifteen yards of linen, and in Germany as much as twenty."

What does he mean here by labor? The mere time of a human being without regard to age, sex, skill, or fitness? Or does he mean the appropriate application of physical force to textile fibers to produce cloths? If he means the former, then ten hours' work of a Hindoo coolie, without other mechanism than a hole in the ground to put his legs in, and a tree overhead to hang his yarn on, would be expected to measure against an Englishman working at his loom. If he means the latter, then a machine in England, without any man in it, but producing many yards an hour, might be measured against a man without a machine working days to produce a yard. He then says, "When each country produced both commodities for itself, ten yards of cloth exchanged for fifteen yards of linen in England and for twenty in Germany. They will now exchange for the same number of yards of linen in both. For what number? If for fifteen yards, England will be just as she was, and Germany will gain all. If for twenty yards, Germany will be as before and England will derive the whole of the benefit."

He then proceeds with an intricate process of metaphysical disquisition of exactly the same order, and of no more value than those which the schoolmen of the middle ages gave to the question, "What would happen when an irresistible body in motion comes into collision with an impenetrable substance at rest."

From the view of political economy taken by the historical

school of economists, in which Adam Smith, Roscher, Henry C. Carey, and Henry Dunning MacLeod are prominent, the exercise in mental gymnastics found in Mr. Mill's chapter on international values does not lie within the domain of economic science—

1. Because it is a supposititious case, and economic science must rest upon facts.

2. Because it is a cloudy, foggy, and indefinable case, expressly made to defy human powers of analysis, and which depends for its claim to respect not upon the fact that it communicates knowledge, but that it resists in a moderate degree the effort to prove that its author slipped in his logic.

3. Because it becomes an impossible case if its terms are made so tangible by construing them in a definite way, as to give them a definite meaning. It is not possible that in two civilized industrial nations, having facilities for production essentially alike, an inequality of the kind supposed in the rate of exchanging broadcloth against linen could exist, unless England and Germany were both cut off from all trade in broadcloth and linen and their equivalent fabrics, not only from each other, but from all other countries.

When Mr. Mill has waded through the morass of what he calls "the windings and entanglements of complex international transactions," he comes out at last with what he calls a "law of the equation of international demand." He states it thus: "The produce of a country exchanges for the produce of other countries at such values as are required in order that the whole of her exports may exactly pay for the whole of her imports." What have we got here save the truism that a country, like an individual, can only buy what it pays for, or more simply, in all exchange there is an exchange. Of course, to make this true, it is necessary to regard the exportation of gold and silver in such quantities as to drain a country of its coin supply, and even an exportation of debts and promises to pay, as a payment.

But what we arrive at is the truism with which the chapter began, viz., that in all international exchange there is an exchange. If something was got without giving any thing in return it would be a free gift and not an exchange. Hence, nothing is evolved at the end of the chapter except what the terms used in the very title of the chapter are pregnant with.

If, however, the principle is sought to be applied between any two nations without including all others, it is converted from a

truism into a falsehood. If, for instance, its application be, "The United States must buy its manufactured goods in England if it would succeed in selling its breadstuffs there, it becomes a falsehood," as the two facts, what we shall buy of any one nation, and what we shall sell to it, stand in no relation of interdependence whatever. We may and do sell to some nations three times as much as we buy of them, and buy of others five times as much as we sell to them. The so-called law of the equation of international demand might as well be applied to an individual. The total of every man's outgo in the long run must equal the total of his income.

5. Decline of the Metaphysical and rise of the Historical Method.—There are certain conveniences and even charms in treating political economy, as Mill and Ricardo have done, as a study of the logic of social tendencies merely. It fits in with the fact that all economic quantities are in a continual state of transition and fluidity—of flux and reflux. The forces with which it deals, based as they are on human interest and desire, emulation and competition, affection and emotion, vary every moment in direction and intensity. The values we compare vary while we are comparing them, and even the standards for comparing and measuring them sometimes outstrip the values in their variations. The instant an economic quantity is seized in one point of view it insists on putting on another function, and appearing in another character. Terms resolutely resist firm and stable definitions, because the things they represent are incapable of resting in the performance of a single function.

Take the term labor. If a man carries mortar from the street to the roof of a building in a hod, is that labor? Certainly not, if the man is a British lord practicing to show his muscle. It is amusement. Certainly not also if the man is a slave in Cuba, working by the compulsion of enforced ownership. In such case the man is capital, in the economic sense, as truly as if he were a steam engine or a horse. Does his labor consist in applying physical force to raise the mortar, or in expending human energy? If the former be true, then if a horse or engine be substituted, that is labor; and, if so, we find capital laboring: and interest becomes wages.

Every other economic term, wealth, value, utility, profit, rent, interest, capital, money, land, production, trade distribution, exchange, consumption, taxation, savings, banks, credits, currency, and political economy itself eludes fixation in any one meaning,

because the things it stands for perform many offices. It takes on of necessity a change of definition for each office it performs. Mr. S. Dana Horton* shows that the word "standard" takes on nine distinct meanings, each of them exact as to its own function.

Mr. Mill evades defining wealth, as the law evades defining fraud, by saying "though nobody can tell what it is, everybody knows what it is."

This very fluidity, apparent everywhere in economic quantities and terms, begets an inclination to avoid definitions, as being merely fallacious attempts to attribute a fixity to the flowing, and to steer clear of historical causes and effects in their sequence as being too complex and intractable to illustrate principles.†

Prof. Sidgwick regards the metaphysical school of economists, commonly known as the English or Manchester school, as having reached the climax of its power at the period of the repeal of the corn laws (1846-50), as having begun to wane in 1860, and as finally losing its authoritative hold on the thinking men of England in 1871. The leading principles of this school are that free competition, *laissez faire*, or to be "let alone" by the government is all that industry asks or needs, that the government is to be run as a fiscal agency, having no other concern than to provide itself with revenue and keep the peace between workers of all kinds, and that the actual world of industry is either at all times the best world possible, or if not it will become so under the stimulus of a little more non-interference on the part of government than it has hitherto enjoyed. The generation from 1828 to 1846 was largely occupied in giving increased popularity to this idea, whose dominant principle was *laissez faire*, and whose political and popular cure-all was called "Free Trade."

Mr. Sidgwick dates the decline of the school from the period, in 1871, when Mr. Mill, reviewing Mr. Thornton's book on Labor, and its attack on the "Wages Fund theory," acknowledged that the theory had been shown to be really no theory at all, but only a circuitous statement which ended where it began. Wages depend on the proportion which capital bears to labor, so long as

---

* See extract in chapter on Money.

† The philosopher Hegel is said to have been engaged in pointing out to his class the "principle" of mathematical harmony which required that on logical principles there should be a vacant orbit space between the orbits of Mars and Jupiter, when one of his pupils informed him that asteroids had just been discovered in that space. "Very likely," replied Hegel; "the principles of pure reason require that the space should be vacant, but the accidents of Nature seldom come up to the standard of pure reason."

capital is defined to be so much money as employers do actually distribute in the form of wages only, and so long as labor is defined to be the number of persons whom the wages thus distributed hire. This truism is of exactly the same nature as that just referred to in Mr. Mill's theory of international values. Mr. Sidgwick pictures the English school of economics as receiving a rude shock when Mr. Mill candidly acknowledged that for fifty years his logic had been imposed upon by its own forceful fluency. It was as if he had taught that in vegetation every leaf owes its size and shape to the ratio which the general fund of leafiness bears to the number of stems on which the leaves grow.

6. Carey's Corrective Influence.—Far more powerful causes, however, than Mr. Long's refutation of the wages fund theory (1867), or Mr. Thornton's work on labor, was the growth in America of a school, largely under the influence of Henry C. Carey's nine economic works and fifty-seven pamphlets, dating from 1835 to 1870, aided by the works of Stephen Colwell, Calvin Colton, Prof. Bowen, Horace Greeley and others. The writings of Dr. Carey found their way into nearly every European language, and were eagerly thumbed in the libraries of every European university. They struck a vein of thought in harmony with French, German and Russian economics. They were echoed in the works of Frederick List and the lectures of Dühring, in Germany, by Ferrara in Italy, and in the essays of Bastiat. Chairs for the special teaching of American constitutional law and American history were founded in German universities, and naturally caused much attention to be given to the views of such American economists as seemed to shed new light on the science.

Dr. Carey was by far the most vigorous and sustained, learned and equipped, versatile and philosophic assailant of the *laissez faire* theory. He opposed the English school at every point—Malthus' theory of population, Ricardo's theory of rent, Mill's theory of international trade, Lord Liverpool's and Sir Robert Peel's notions on money, and in the latter seven of his works the theory of free foreign trade. In 1835 Mr. Carey published "an essay on the rate of wages," assailing the Ricardo theory that as wages rise profits must fall, and arguing that as profits rise wages rise. His eight succeeding works, presenting a complete philosophy of society, have been the armory from whence were originally supplied many of the weapons with which German and French economists fought for time in which to build up an historical school.

The result of the American contest of 1861-65 tended far more powerfully than any admission by Mr. Mill to give influence and power to American thought. The government had practiced *laissez faire* toward slavery, letting it alone until it was found that it would not let the government alone ; and hence it or the government itself must fall. The century, whose chief business it had been to teach that government must not interfere with industry, found its most stupendous effort to be the conduct of the revolution for insuring the payment of wages to servants. Russia passed through a like revolution. England dropped the *laissez faire* theory to fix judicial rents for Irish tenants after the practice of *laissez faire* had destroyed their power to pay customary rents. Protection to industry and various forms of qualified state socialism were in the air. English opinion was powerless to resist them. Jevons, McLeod, Leslie Stephen, and even Bonamy Price discovered that doctrines which fifty years earlier seemed nearly self-evident were waning. The epoch of assumption was past. The epoch of proof had come, even in economics. Exactly why, nobody fully knows, any more than we know why the fashion of believing in witchcraft ceased when it did. But it ceased. In 1885 a convention of most of the teachers of political economy in the United States was held at Saratoga Springs. It agreed without debate that the doctrine of *laissez faire* was an error.

7. The Historical Method is not a History of Economic Opinion merely.—Political economy is not a mere history of the opinions or summary of the controversies in which the several schools of economists have labored to evolve or place in a clearer light their views.

It would exist, as a practical art and scientific theory, among nations and legislators, if no books were ever written upon it. And indeed, no books of economic criticism could exist were there not the action of legislators to be criticised. Hence the basis of all economic discussion is practical statesmanship, and the latter must always be regarded as furnishing the material for the former. In its turn, again, the basis of practical statesmanship is the desire of the dominant forces and classes in society, whether their dominance is that of numbers, wealth or other causes, to promote their own interests, modified by the degree in which the growth of the altruistic sentiment prompts them to promote the interests of the minority or servient class, but this generally, however, as a means of ultimately promoting their own. In turn the

forces which underlie legislation will generally be found to be the desire of the successful or powerful classes to maintain their success or promote their power. Political economy is in fact a study of the action of the influential and dominating masses of men making itself known through legislation, in its bearing on the promotion of the growth of wealth, power and freedom, as ethics and jurisprudence are the study of the like action of the dominating mass or ruling class, as it bears on questions of moral right or jural right.

What the dominating mass of a state hold to be right, is right, for the time being, in that state. At least there is no practical appeal. What the mass hold to be law is in like manner law. And what the mass hold to be economy is, for the same reason, economy. But what the critics say would be a higher moral right remains a mere private opinion until the dominating mass sanction it. So of law, and so of economy. Hence in any true history of political economy the history of legislation would need to come before the history of the criticism, and the history of the changes in human interests which brought about the legislation would need to precede the history of the legislation. But, in fact, all attempts to state the history of political economy heretofore have been attempts to narrate the course of the criticism without narrating either the course of the legislation on which it bore or the changes in human interests which gave rise to it.

Histories of political economy are therefore pervaded by two fallacies, viz., the substitution of a part for the whole ; or of the criticisms of the economists for the history of the economies, and the substitution for what the economists have actually written of that which the historian assumes to be the purport and effect of their writings. It is always unsafe to accept as true the description of any set of opinions in the language of its adversaries. This is especially true of economic discussion. One can not be sure of rightly apprehending the meaning of any author until he reads his views in his own words.

Thus in describing the mercantile system Mr. Shadwell * says : "It was supposed that money alone constituted wealth ; and as they never thought of disputing that wealth consisted of gold and silver, they held themselves bound to prevent as far as possible the exportation and to encourage the importation of those metals." Mr. Mill states this point as strongly as Mr. Shadwell.

* "Political Economy," by J. L. Shadwell, p. 10.

On the contrary Mr. C. S. Devas, also reviewing the history of the economists, says: "Looking to the appearances of the world with which they were familiar, and seeing how commercial and political greatness belonged as a fact to those countries wherein the money in circulation was abundant, the economists whom we call the mercantile school, imagined that the economical well-being of a state is in proportion to the amount of the precious metals circulating within it, and that in consequence to preserve and increase this amount to the utmost, is the fundamental rule of economical policy. But (with some rare exceptions) they by no means held the error often attributed to them that wealth consists in money alone; nor even can they be charged with making light of agriculture, and wishing it neglected in comparison with manufactures and commerce."

These flat contradictions between two sincere economists describing the same fact, warn us how difficult a task it is to correctly state the history of economic discussion.

Instead of being a matter to be lightly skimmed over as a prelude to the better comprehension of the existing economic condition of society, it requires the largest knowledge of the present economic conditions of man to enable us to form any proximately accurate view of his past economic condition. Of the two the present is the more comprehensible, because it can be observed, and the past eludes us because it contains so many unknown factors.

8. Limitations on the Historical Method.—To us the ownership by an ancestor, as in Rome, of all his descendants and of their property, seems the product merely of a despotic spirit, an evident wrong which came gradually to be abolished. But to a Roman the incoherence of our present family system, whereby some members of a family might perish of hunger while others had wealth, would seem unnatural and depraved. We think the Roman unjust by forgetting that in return for allegiance the humble received support and security from the strong. And we fail to set off the degree in which the present condition of society exposes individuals to want in the event of the failure of their industrials efforts, while persons nearly related in blood, possessed of large means and capable of giving profitable direction to their efforts, are neither required nor allowed by law to do so. The key to the difference lies in the fact that in Rome society was chiefly organized by means of authority or force, while modern society is organized by means of money, on the basis of having nothing but what we can pay for.

A like difficulty arises in the effort to compare our life with the life of the middle ages, in which the church ruled, or with any unlike form of social economy. The past being by far the more obscure of the two, and the more difficult of apprehension, is incapable of throwing the degree of light on the present, that one might easily be brought to assume. People living in an industrial age can very imperfectly apprehend why any body should ever have done the amount of fighting necessary to make a military age, or should have esteemed athletic sports so highly as to have measured epochs of time by olympiads, or should have made reverence for the dead, rather than the comfort of the living, the root-idea of their architecture, as in Egypt.

We are not greatly helped in the effort to understand our own period by the examples of those who would have found it as impossible to do our work as we would to-day find it to do theirs. The remote, whether in time or space, can only in a limited way instruct the near. The general, whether in war, philosophy or economy, can only remain general by receiving constant aid from the special. No rule requires to be more frequently applied in dealing with new exigencies in business or in finance than that "circumstances alter cases," that new wine can not be put into old bottles, or as Hans Breitman pleasantly puts it,

> "The mill can not grind with the water that is past."

Lord Beaconsfield on a memorable occasion parried the thrust that his policy at a former period differed from his present by replying, "many things have happened since then." The changes in social conditions forbid that the economics of the present or the future can travel on all-fours with that of the past; yet still the unity of man makes the past the only lamp by which the future may be foreknown. But the law of the economic value of past events, or of events made distant by the unlikeness to ourselves of those among whom they occur, is like the law of attraction in physics—it is directly as the magnitude of the event and inversely as the square of its distance from us.

It may be said generally that the more competent individuals become to provide for themselves the less is the obligation of others to provide for them, and hence moral obligations contract as economic competency is diffused. In the middle ages each social class owed the other much. The lord owed his tenants protection and support. The tenant owed his lord obedience as well as rent. Perhaps obedience was his rent. Now landlords and tenants owe no such duties. Then the church owed the trav-

eler a couch and a meal. Now it owes him only a free seat if he wishes to hear a sermon. Then very little of what society enjoyed came by purchase. Most of it came by the performance of some moral obligation. Now but little of what society enjoys comes without being paid for. The former state was the more despotic but also the more affectionate ; the latter is more free but also more mercenary. The former had more duties ; the latter more rights.

This progress has been carried so far that one economist * writes on "What the social classes owe to each other," with the result as the conclusion that they owe nothing, and that human happiness is achieved in the degree that they claim nothing at the hands of others. This is extending the *laissez faire* doctrine in a new form, viz., "Not merely should the state let the social classes alone, but the social classes should let each other alone." Human nature rebels against this utter excision of moral obligations from social economy. It also rebels against the opposite theory that the state should be every body's guardian in all things. Somewhere between these two extremes the state draws a compromise. Where it should be drawn is a question which some will always continue to argue from the moral, others from the economic standpoint.

Society as an organism has health at sometimes and disease at others, and health in some parts and disease in others ; with this peculiarity that "in the diseases of the body politic the physicians and nurses are themselves parts of the diseased organism."

In consequence of this diseased condition, the instant social questions are discussed from the moral standpoint, each faction finds no terms of moral eulogy sufficiently glowing for its own principles, and no terms of dispraise severe enough for those of its adversary. All facts, events and doctrines thus come to have their two sets of names—those by which they are known to their friends and those by which they are known to their enemies.

As the traveler in India found that the gods of any one province would be enrolled among the devils of the next province he visited, so the student of economics will discover that names of moral praise or dispraise serve only to indicate the quality of the spectacles through which the writer observes. It may be said generally that the only objection to the discussion of economical questions from the ethical standpoint is that the disputants burn

* Prof Sumner: "What the Social Classes owe to each other."

with more indignation than instruction, and shed more heat than light.

A very general drift of modern thought in favor of determining social questions by a wide survey of facts is shown by the increased care and means used each year to collect statistics. In the United States, the federal government and the states are yearly increasing the extent of their inquiries. Bureaus of statistics as to labor, production, the fertility of plants and animals, commerce, transportation, education, etc., are in order. Cities and boards of trade, congressional committees and the press, concur in feeding the appetite for wider and sounder generalizations and truer judgments concerning social phenomena. They confirm the saying of Roederer, "Politics is a field which has been traversed thus far only in a balloon : it is time to put foot on solid ground."

9. Relation of Economics to Ethics.—Questions of what we ought to do belong to ethics. Questions of what it is generally believed and held that we ought to do belong to morals. Questions of what it will profit men and nations in the immediate future and in a material and secular sense to do, belong to economics. And questions of what it will profit a man to do in the absolute totality of his existence, and for eternity, belong to religion. There is such a filiation between all these forms of the one idea that it is not strange that some have treated economics as a branch of ethics. They hold that the shortest road to profit is to do as we ought, or as it is generally believed and held that we ought, or as we are taught that for our eternal interests we ought. In the middle ages, as Roscher discovers, political economy was at least in one instance taught as a department of dogmatic theology.* Doubtless there is still a very large following for those who discuss questions of social economy from the ethical standpoint, *i.e.*, who assume that it is much easier to know and do what is right, than to find out what is profitable to society in the utilitarian sense. The danger of this position becomes apparent only when economic and ethical quacks arise, very sturdily insisting that something is morally right which perhaps has never been tried, if tried would be very disastrous, and is only attractive to its proposers because their fancy runs away with their judgment.

* Roscher, Vol i., p. 102, by Lalor: "Thus for instance G. Biel (ob. 1495), the "last of the schoolmen," gives us his doctrine of political economy in a work on dogmatic theology, in the chapter on penance, his starting point being the inquiry, how the economic damage caused by the sinner may be repaired."

On the other hand economic investigations often serve to displace erroneous moral notions, very sincerely held, by showing that they involve great injury and are in fact immoral. The utilitarians hold that the ultimate standard of right is "will it increase the totality of human pleasure and diminish the totality of pain." The intuitionists answer this by saying that this is a computation which nobody can make; that it resolves all morality into expediency, which it is not, and that the sure mode of increasing the totality of happiness is to follow our convictions of right as being a clearer as well as less selfish guide than our sense of present or future interest. Both considerations must blend and harmonize in any wise system of teaching.

10.—The Scientific Method.—The scientific method of investigation in political economy, as in all the other sciences, is that of observation, experiment and comparison of the widest possible array of facts, and when these results have been generalized or classified, these generalizations or deductions become economic laws. If, for instance, it be claimed to be an economic law that land should be owned by tribes, and that no private ownership of land should be allowed, the scientific economist will observe and collect all the known instances where private ownership of land has prevailed; he will then observe and collect all the known instances in which tribal ownership of land has prevailed to the exclusion of private ownership. He will then compare the relative productiveness of the two systems. If he finds that tribal ownership stands associated with savage life and low rates of production, as among the American Indians, the peasantry but not the wealthier classes of ancient Mexicans and Peruvians, the wild tribes of Siberia, Mongolia, Tartary, and the Congo River, indeed with slave life and savage life everywhere, while civilization in Egypt, Greece, Rome, modern Europe, and America stands associated with private ownership, and the more productive and intense the industry the greater the scope given to private title to land, credits, contracts, and franchises, and that not in a single instance has any people become actively productive except through private ownership, he concludes that the attack on private ownership of land is an error.

The scientific method does not object to hypothesis, or what Mr. Mill styles "*a priori* conclusions, based on the laws of human nature." It only objects to the substitution of these results of guessing, before "testing them by experience or comparing them with concrete phenomena" into the place of perfected economical

reasoning. The sole scientific function of hypothesis is to suggest some new line in which investigation by observation, comparison and experiment may proceed. The exercise of the scientific imagination by an observer of shrewdness and experience may be of the highest value. Franklin imagined that lightning was electricity before he tested it by his kite. Watt thought steam would move an engine, and Fulton had faith that an engine would propel a boat better than a sail. Columbus conceived that there was a new world in advance of proof, and Kepler that the line drawn from the sun to the earth, though it differs in length every day, describes always equal areas in equal times. But most excellent guesswork often proves erroneous. The guess is idle save as a suggestion toward one or the other of three modes of scientific inquiry, viz., by observation, comparison and experiment.

11. The Philosophy of Statistics.—We cannot, with Cossa, say, "Let no man trust himself to fool with statistics until he is well grounded in theory." For this is equivalent to saying, "Let no man find out facts until he first knows the reasons for them." Reason or philosophy is to facts what theory is to statistics. A sound and trained reason is only possessed by one who has made a wide and careful survey of the facts which justify the reason. So we would rather say, let no man fool with economic theories until he is well grounded in economic facts. Statistics are historical facts presented, in blocks and masses, so as to show quantity, also in grades to show quality, with dates and periods to show momentum or force of movement, and in sequence with events to show causes.

In thus commending statistics we must warn the reader that those who have voyaged most, upon their shoreless sea, are best aware of their dangers. Statistics of themselves are blind. They have neither judgment, conscience, perception, nor intelligence. Unless the person who uses them possesses these qualities they may be made to say any thing. Hence, the adage has grown up since the advent of the Baconian, positive or statistical school, "Nothing can be so deceptive as figures—except facts." Excellent figures may be used in behalf of a bad theory, and deplorable errors may be advanced to sustain a good one. A correct theory will not, therefore, make our statistics true. When the figures are disproven it is not to be necessarily inferred that the proposition in whose behalf they were adduced is weakened.

Thus, in a document designed to indicate the magnitude of "The Drink Bill" of the American people, the annual value of

spirituous liquors consumed is correctly stated at $900,000,000. In very proper contrast with this enormous waste, the cost of public instruction is set down at $85,000,000, and the cost of missions at $5,000,000. So far well! But the statistician in comparing these figures with the cost to the people of their annual consumption of meat, inadvertently assumes that if the United States census gives any of the figures of meat consumption it must give them all. In fact, however, it only gives the value of the meats packed in the packing houses, these being all which can be classed under "manufactures," and it is as a form of manufactures only that meat statistics are taken. All the meat supplies furnished by the 76,241 butchers of the United States, and all meats butchered on farms by those who raise it, and all poultry, game and small meats of every kind are omitted from the census. Hence, the unwary statistician in search of the figures of meat consumption to compare with spirituous liquors, states them at $303,000,000, being the correct amount named in the census, but only for the meats packed in packing houses. This would make the meat consumption for 51,500,000 people about $5 per capita per year, or, say ten cents per head per week. In fact, in manufacturing and urban populations, the cost of the meat bill is more nearly $1 per head per week. The consumption of bread, groceries, and vegetables combined is about half or two-thirds as much more. Assuming the cost of consumption among farmers to equal that in cities, the two classes of food, animal and vegetable, would cost about $3,300,000,000, or about four times the expenditure for spirituous liquors, which is about the proportion which a person of good judgment would assume if not misled by the figures.

An imposing pretense of statistical proof is also sometimes made by collecting a formidable array of statistics of a feature of the case which is not in dispute, and leaping over the real point in dispute without any statistics whatever that bear upon it.

Thus Mr. Springer, of Illinois, in an article in the *North American Review*, purports to state in statistics, by how much the cost of various articles of American production is increased to the consumer, by the duty on importations. He concedes that they are not increased in cost by the whole amount of the duty, but adopts a purely deductive, *a priori*, hypothetical and unsustained fraction of a third, half, or two-thirds of the duty, and says it is reasonable to assume that they must be increased by

this amount at least. The point to which his statistics were needed was that of the degree in which in any one case the duty causes an increased price. This was the knob of the question, and this he covered wholly by a guess. Having guessed at his standard, the calculations based upon it were as devoid of any element of statistical proof as if he had first guessed at a quarter of the amount sought and then multiplied it by four.

Again, economists sometimes assume that statistics show as to one class what they only show as to a class having very unlike interests. Thus Mr. Fawcett says: "There is no surer test of the prosperity of the laboring class than the low price of bread, and there are few statistical facts better substantiated than that the marriages among the laboring class increase with the fall in the price of bread."

But Mr. Fawcett does not say whether the laboring class to which he refers is that which produces or that which consumes the bread. In 1849, when the effort to make bread cheap in England by giving it free importation from abroad, regardless of the interests of the bread producers, culminated, the ejectments in Ireland among the bread producers rose to eight-fold their previous number, and the arrests for crime increased in like proportion, population diminishing in five years by three-eighths. Whatever force Mr. Fawcett's alleged statistics, if such there be, may have, it could only relate to a portion of the laboring class, viz. to those that labored in factories, and not on farms.

There are also errors in the collected statistics which could only be removed by costly investigation, and, no such investigation having been made, no removal of the error is possible. This arises especially where statistics of the same fact are taken by the officials of two governments, as where both keep an account of the shipment or receipt of a product which to the one is an import and to the other is an export.

Thus* in a recent year French customs officers returned the export of silk from France to Belgium at 36,862 kilogrammes, while the Belgian officers returned the import of silks from France for the same year at 25,947 kilogrammes. In the same year the export of coals from Belgium to France figures in Belgian exports as 21,121,520 cwts., whereas the same fact figures

* "The Condition of Nations," by Kolb, Brewer and Streeter, p. 895.

in French imports as 19,655,869 cwts. In 1853 the export of wool from Belgium to France amounts in the Belgian returns of exports to 371,260 kilogrammes, while the French customs returns of arrivals of wool in France from Belgium show that 3,301,500 kilogrammes were received. In one year the value of wool imported into Great Britain from France is stated in the French books to be 11,750,000, francs or £470,000, while in the English books it appears as of the value of £1,280,280. In one year French returns show an export to England of cotton to £345,760, while English returns show an import of cotton from France of only £180,000. The next year France sends to Great Britain, according to French returns, 952,035 kilogrammes of silk goods, while Great Britain receives from France, according to English returns, only 233,739 kilogrammes. So by British returns Great Britain sends into France 245,925 kilogrammes of silk, while according to French accounts France receives from England more than twice as many, viz., 597,354. The English return their export of wool to France in one year at 2,207,741 kilogrammes, while the French return their import of wool from England at 3,940,496 kilogrammes. In corn 87,716 hectoliters on one side appear as 312,768 hectoliters on the other. Coals start from England as 7,292,411, and arrive in France as 5,631,829 cwts. Comparing English customs returns with Belgian, 1,015,173 kilogrammes of coffee dispatched in one year from Great Britain to Belgium, are made to arrive in Belgium as 572,613 kilogrammes. Again from England to Belgium 4,036,049 kilogrammes of wool are exported, and only 1,643,766 kilogrammes of wool are entered in Belgium in the same year as received from England. 1,676,701 kilogrammes of hops are sent from Belgium to England, and only 861,466 appear in English returns as received from Belgium. Belgium sends glass goods to the British Isles, in quantity 3,776,544 kilogrammes, while England acknowledges the receipt of glass goods from Belgium in 5,645,826 kilogrammes. It is probable in the cases cited that the returns on both sides are accurate in the mode in which they are taken, but that the quantities which are covered by the same terms are really different quantities. For instance, in dealing with wool, the customs officers on one side may have but one designation for wool, or hair, shoddy and fleeces, while the other may have two or three, viz., wool and mixed, or wool, shoddy, hair and mixed, in which case what one sends as wool will not be received by the other as wool. This will make the returns differ in the

statistics, while each will be truthful according to its own system and law, but comparisons made on such data must be made with care, *i. e.*, figures when compared must be known to have been arrived at by the same process of collection. Again it may be that the French system of receiving goods at the Belgian frontier does not distinguish between English goods coming through Belgium into France and Belgian goods, while the Belgian may call one a transit of English goods through Belgium and not an export of Belgian goods. It is certain that if the two countries classified goods in the same way, and both made correct returns, there could be no discrepancy.

When one sees very startling facts presented as statistics, therefore, it is proper to call for the mode, or system, or authority by which the statistics were collected. If they were collected in different countries, or at far distant periods of time in the same country, and the contrast they present with what the common judgment would infer is very great, it is reasonable to withhold assent until it is known that the general process by which the contrasting data were collected is the same.

We are told* that in France, previous to the existence of railways, there was one passenger killed to every 335,000 carried, and out of every 30,000 carried one was wounded; whereas out of 1,781,403,678 passengers who traveled on the railways in France between September, 1835, and December, 1875, only one to every 5,178,890 was killed and only one to every 580,450 was wounded. This makes railway traveling seventeen times safer than traveling in a diligence or "stage" behind horses. On French statistics it has been estimated that if a person could lose his life only in railway traveling, the chances would be that he would only die at the age of 960 years. On Belgian railways the proportion killed of those who travel on railways is only one in 20,000,000, or one-fourth that of France. In the United States, on the other hand, in 1875 there was one wounded by railway travel in every 172,000 carried, and one killed in every 810,000 persons carried. Statistics also show that in England the dangers of railway travel exceed those on the continent and even those in the United States, being in 1876, 1,245 killed out of 538,287,295 carried, or one in about 430,000, which is a rate essentially equivalent to the old stage coach rate in France. Now either the railroad travel is

*"Condition of Nations," Kolb, Brewer and Streeter, 899.

much safer in France and Belgium than in England and the United States, or accidents are less fully reported.*

It happens that in France and Belgium, railways are under government control, while in England and America they are under private control. If now it should also be true that, under state control, the railway operators who have accidents are dismissed, while under private control they are not, this fact might cause more accidents to be concealed or not reported, and might also cause fewer to be committed. On the other hand, in France, under the old diligence system, the rate of accident was about as great as the rate now is in England under the railway system.

As the public mind has a fixed impression, or common-sense judgment, that railway travel is as dangerous as stage coach travel, it would need fuller statistics to make it plain whether the pretended increase of safety of railway travel over stage travel in France does not result from a less trustworthy mode of reporting the deaths under the system of state control than under that of private control. If not, then a strong case is made out for state control over private control, as respects safety in travel, as well as for railways over coaches drawn by horses.

Among the most doubtful statistics in general use are those entertained in Europe and America concerning the population of China. Very eminent publicists discredit them. In explanation of certain discrepancies in these statistics it is said that when the Chinese government called for returns of population with the view to distributing taxes, the population returned was small, but when returns were called for as the basis of distributing imperial aid or charity among the provinces the population rose to "myriads of millions."

So in parts of the United States the desire of counties to escape taxation has led to assessments of values of both land and personal property at from one-sixth to one-twentieth of their true

---

In 1884 the average number of miles a passenger could travel by rail without being killed was :

	MILES.
In the United Kingdom	194,892,255
In New York	172,965,362
In Massachusetts	503,568,188

WITHOUT BEING INJURED.

In the United Kingdom	6,992,662
In New York	13,940,754
In Massachusetts	28,955,630

* Dorsey on English and American railroads, 18.

value. In one case the Supreme Court of Illinois, acting under a statute which required all land to be assessed at its full and fair value, corrected an assessment of railroad property conceded to be at only one-third its value, as being too high, on proof that the average assessment of other lands in the county *was at only one-fifth of their value.* And in the city of Chicago in the ten years from 1871 to 1881 assessments of aggregate values of real and personal property declined for the whole city by two-thirds, whereas the actual values nearly doubled.

So in the empire of France prior to the war of Napoleon III. against Germany ending in Sedan, the published statistics of the French army called for 1,400,000, whereas only between 400,000 and 500,000 men were in the service.

Again, in the debates on the slavery issue, preceding the war of the rebellion, Mr. Toombs and other Southern senators cited the small returns of pauperism in the Southern States against the large returns in Massachusetts as evidence of the greater wealth of the Southern States. To this it was replied that returns of pauperism measured only the extent of the state provision for the relief of the poor, and not the extent of the poverty. A state might escape all statistical appearance of pauperism by making no provision whatever for its poor.

12. The Results of Statistics.—The difference in certainty between the *a priori* and the historical method will appear by contrasting the perfect blank to which the mind of any *a priori* reasoner would be reduced if asked to say how many bachelors in France would marry single women in any given five years ; or how many would marry widows ; how many widowers would marry spinsters, and how many widowers would marry widows. But let any child of fifteen years of age be told what the actual proportion was in the three following periods, of five years each, and he could instantly answer the inquiry for any future period within a narrow margin. The proportions were:*

	Years 1836-40.	1841-45.	1846-50.
Bachelors with spinsters	8,339	8,386	8,355
Bachelors with widows	351	354	371
Widowers with spinsters	982	937	934
Widowers with widows	320	323	340

Any person glancing at this table could safely predict that in the five years from 1880 to 1886 in France the marriages of single

* "Condition of Nations," p. 27.

men to single women would be between 8,300 and 8,400, that the marriages of bachelors with widows would not vary 50 from 350, that the marriages of widowers with spinsters would be within 50 of 950, and that the marriages of widowers with widows would be between 315 and 350.

Still more difficult would it be on any *a priori* basis to determine how many men under thirty years of age or under forty-five will marry women of over 60 years of age in Belgium. The case comes entirely within our reach, when we learn that in the six following periods of five years each, women of over 60 married men of the ages here given :*

Periods of 5 years.	Men of 30 years and under.	Between 30 and 45 years.
1841 to 1845	Twice	Six
1846 to 1850	Once	Six
1851 to 1855	Once	Six
1856 to 1860	Once	Six
1861 to 1865	Once	Six

13. Utility of Statistics.—The national utility of such statistics may be illustrated by the fact that the belief once widely prevailed that people subjected continuously to an enervating climate became "acclimated," so that it affected them less than those newly brought under its influences. If this were true it would be the policy of the British government to continue troops permanently at whatever post they were sent to. If the reverse were true it ought to change them frequently. Statistics were collected of past experience, and it was found that the mortality was twice as great among those continuously subjected to the strain of a bad climate as in those exposed off and on, or, in effect, that the longer the human frame was exposed to injurious conditions the less was its power of resistance. Hence the government ordered that no troops should be stationed in distant colonies more than three years. The result was that the average annual mortality of British troops serving abroad, which had been previously 48.58 in 1,000, was, subsequently to the order, 24.2, a reduction of one-half.

In certain cases statistics relating to health point the way to investigations concerning the causes of diseases as related to either climate, diet, water, or hygiene of particular districts with irresistible force. Thus in France, out of 100,000 recruits in one department of the Pas de Calais, only 118 had to be exempted from

* "Condition of Nations," p. 27.

service for scrofula. In another department immediately contiguous (du Nord) 2,809 out of 100,000 were exempted for the same cause. One department contained not one case requiring dismissal for glandular disease, another contained 8,832 in 100,000. In one only 36 in 100,000 were incapacitated through loss of teeth, in another 6,700.

14. Regularity of Phenomena Shown by Statistics.—Accidents in coal mines are so regular that in England the production of 89,419 tons of coal costs a life, in Germany the production of 70,461. Among the miners of Frieburg 1 man and 12 women in 10,000 reach the age of 90 years. Among the general laborers 10 men and 26 women out of 10,000 reach the same age. Relief from all work by retirement from business tends to shorten life and brings it below that of the peasant. Statistics also show many forms of peculiar natural compensation, as that years of great epidemics will be followed by years of so much less than the usual number of deaths, and with such an increase of births as to nearly restore the population to what it would have been without the epidemic.

One of the most important facts disclosed by statistics is the constancy of the ratio which crime, and other forms of action which are believed to rest on perfect freedom of the individual, will bear to society and to certain of its conditions, especially illiteracy and destitution. In Great Britain* the record of coroners' inquests for the three years 1865, 1866, and 1867, shows a constancy in crime like or exceeding that which pertains to the revenue or to any department of production.

	1865.	1866.	1867.
Murders	227	272	255
Killed	282	223	179
Justifiable homicides	6	5	6
Suicides	1,397	1,360	1,356
Accidentally killed	11,397	11,262	11,172
Deaths, cause unknown	222	225	208
Found dead	2,657	2,697	2,702
Natural deaths	8,823	8,882	8,870
Total	25,011	24,926	24,648

* "Miscellaneous Statistics of Great Britain," vol. i.

Of this total:

Males	17,566	17,496	17,304
Females	7,445	7,430	7,344

15. Statistics Taken With a Bias.—Statistics have been extensively taken in most countries to show the proportion which crime bears to illiteracy, to particular forms of religious faith, or to intemperance, while in very few cases are we able to learn the degree in which crime results from poverty. It is important that those who have charge of collecting statistics for governments should be without bias or theory as to what the statistics ought to prove. While in ordinary years in Ireland the arrests for crime are only from 4,000 to 5,000, in 1849, the culmination of the famine, they rose to 41,989, from which they fell to 11,788 in 1854, simultaneously with a fall in the number of ejectments of small householders from 74,171 in 1850 to 8,989 in 1854, to 4,972 in 1862, 311 in 1869, and 444 in 1870. Again in Cis-Leithania (Austria) in 1871 out of 22,620 persons convicted of crimes, 18,820 were utterly destitute, 2,637 were on the verge of destitution, and only 163 were well-to-do.

It results in errors of inference also, in the treatment of statistics, both in politics and economics, to display abnormal industry in collecting the facts which are supposed to be the effects of a particular cause, and to make no statistical or other research which might develop other causes not recognized, or show a greater relative power in them than in the one cause assumed.

For instance, Helper's "Impending Crisis" displayed with great fullness the superiority of the productive industries of the Northern States over those of the Southern, leaving it to be inferred that this superiority was wholly due to the relative conditions of the laborer of the two sections as being the one free and the other enslaved. It made no account of the difference, in quality and productive value, between a population wholly European, inheritors of thirty centuries of civilization, and a population, forty per cent. of which was African, inheritors of but three centuries of civilizing influence. Here the statistics might all be true, but the inference might require to be modified by other statistics showing the relative productive value of newly civilized races compared with those among whom habits of production had been longer inherited. Nott and Gliddon, in their work on "Types of Mankind," had presented historical data tending to show the primeval and perpetual inequality of the two races, white and black,

leaving it to be inferred that this inequality necessarily justified slavery. The historical data might be correct, and the inference exaggerated.

So Mr. H. F. Redfield published a careful collection of statistics showing that in the twenty years after the war of 1861–5, upwards of forty thousand homicides were committed in the Southern States, that a very large proportion of them went unpunished, and that the ratio of homicides to population was several times greater than in the Northern States. The inference appeared to be that the Federal Government, whose police powers were so imperfectly developed that it was powerless to prevent the assassination of two of its presidents, should exercise police jurisdiction either throughout the South or throughout the Union. It was thus assumed that the ratio of murders would be equalized by bringing the two sections under one administration of law. This again overlooked the fact that one of these sections was almost wholly of one race, while the other was divided nearly equally as respects numbers between two races, between which marriage was repugnant, and social equality and sympathy practically impossible. No observant person can have any reasonable doubt that an introduction into any one northern state, of an alien race to the extent of forty per cent. of the whole, too unlike the existing to intermarry or associate, would be strenuously opposed on all sides, and if permitted would greatly increase the rate of homicide.

The necessity of collecting duties on imports leads also to the collection of very full statistics of imports and exports in most countries,* while so far as the internal trade remains

* *W. Stanley Jevons* ("Theory of Political Economy," p. 23), says: "I do not hesitate to say, too, that economics might be gradually erected into an exact science if only commercial statistics were far more complete and accurate than they are at present, so that the formulæ could be endowed with exact meaning by the aid of numerical data. These data would consist chiefly in accurate accounts of the quantities of goods possessed and consumed by the community, and the prices at which they are exchanged. There is no reason whatever why we should not have those statistics, except the cost and trouble of collecting them, and the unwillingness of persons to afford information. The quantities themselves to be measured and registered are most concrete and precise. In a few cases we already have information approximating to completeness, as when a commodity like tea, sugar, coffee, or tobacco is wholly imported. But when articles are untaxed and partly produced within the country, we have yet the vaguest notions of the quantities consumed. Some slight success is now at last attending the efforts to gather agricultural statistics; and the great need felt by men engaged in the cotton and other trades to obtain accurate accounts of stocks, imports, and consumption will probably lead to the publication of far more complete information than we have hitherto enjoyed. The deductive science of economics must be verified and rendered useful by the purely empirical science of statistics. Theory must be invested with the reality and life of fact."

untaxed, no government supervision exists over it, and no statistics of it are preserved. This brings into the foreground the imports and exports of a country, as if these were the substance of a nation's welfare, whereas, in a country of large extent and diversified productions, the import and export trade combined may not be a hundredth part of its internal trade in volume or importance. There have been long periods of years when the tonnage and values transported through the Erie canal alone exceeded the entire imports and exports at all the ports of the United States. Moreover, if a manufacturing section like New England happens to be an independent nation by itself, all the commodities it sends out figure as "exports," and all the food and raw materials it buys appear as imports. In this case the export of shoes from New England* would be twenty-fold that from Great Britain,† yet her industrial activity might be less than it now is, though by reason of New England being part of the Union, and a large part of her shoe trade being with other parts of the United States, from whence also she buys much of her raw materials and food, this entire trade, which is just as valuable as it could be if New England were an independent nation, cuts no figure in any schedule of imports or exports.

Certain kinds of statistics are thus brought into prominence because the necessity of collecting a particular tax causes them to be fully and accurately collected, and not because they are the best by which to test a nation's progress. Writers who have a bias in favor of regarding this class of statistics as identical with national prosperity, will cite the larger foreign trade and banking of England, whose small area and insular position cause her to depend largely on foreign trade and banking, as proof of her superiority over countries like Russia and America, whose real greatness would not be seriously diminished, and might in many departments of industry be increased, if their foreign trade were wholly extinguished.‡

*100,000,000 pairs. †4,200,000 pairs.

‡For instance, Sir Thos. Brassey says ("Work and Wages," p. 168): "The superiority of England over every competitor in the industrial field, is sufficiently proved by the proportion of our exports per head of the population. In England the rate is £6, 3s., 2d., while in France it is only £2, 18s., 3d., and in Italy, £1, 4s., 8d."

These facts merely indicate insular position. If London were insulated from Great Britain into a separate nation, so that all its trade with England would count as "imports and exports," it would be found far greater than that of the whole of Great Britain. On the other hand, unite in one empire Great Britain and the colonies with which the British people trade, so that their present trade with them will be left out of "imports and exports," and the foreign trade of the whole empire would shrink statistically, though the actual trade might increase.

16. The American Impulse Toward Economic Progress.—Circumstances have made the United States of America, during the past half century, the field of most easy and rapid progress in the development of economic science. It has been the country of by far the most rapid growth in wealth. Where wealth grows most rapidly the laws governing its growth will be most successfully studied.* This follows as naturally as that the military art should develop most rapidly during war; that fine art should achieve its best works where most painting and sculpture are evolved; that most agricultural implements should be invented where agriculture is most extensively conducted, or that soils should grow in fertility most rapidly where the soil is most intensively tilled.

The United States, by presenting thirty or forty systems of banking under state control, followed by one under national control, have afforded the best school in which to study the monetary side of political economy. By its varied experience in manufactures, its rapid development of railways, its diffusion of free education under state control and aid, all being more or less under nearly forty independent systems working side by side, it has afforded the most apt school in which one having economic insight could observe.

Every economic measure has endured in the proper committee of state or national legislation the assaults of critics engaged in the particular kind of business which the measure would most affect, and whose pursuits rendered them most competent to furnish original information bearing most directly on the point. These have more value than the data which have yet found their way into books. If a canal were to be built, both those living on its route and those who could derive no immediate benefit would be heard. If a duty were to be laid or removed, both importers and manufacturers of the particular article on which the duty

---

**Mulhall*, a leading English statistician, says of us: "Every day that the sun rises upon the American people it sees an addition of two and a half millions of dollars to the accumulated wealth of the Republic, which is equal to one-third of the daily accumulations of mankind.

They are as follows:

United States	$825,000,000	per annum.
France	375,000,000	" "
Great Britain	325,000,000	" "
Germany	200,000,000	" "
Other countries	725,000,000	" "

See also Gladstone's remarks in "Our Kin Beyond the Sea."

was proposed to be laid would attend. In this manner the bearing of legislation on rival industries would be studied in the light of the practical knowledge possessed by the men who conducted, or desired to conduct the industries, or who purchased or desired to purchase their product.

It was the necessity, on the part of rulers, to accommodate the action of government in laying taxes to the industrial wants and circumstances of the taxpayers, that originated the British House of Commons, and with it that bi-cameral, or two-chambered representative legislature, which is so closely copied in our House of Representatives, not only in the federal government, but in each of the state governments. The British legislature, in its inception, was a council of notables summoned to advise the king. The Commons were an influential lobby of taxpayers of note who convened to petition the king and lords as to the mode in which they should be taxed. The formula of enactment recited that the laws were passed by the king in person, with the advice of his lords, spiritual and temporal, *upon the humble petition of the Commons.* Hence, free popular government in modern times grew out of the principle of respect for a lobby consisting of business men, producers and consumers, who sought to explain to the law-makers the practical effects of proposed measures of legislation. It still remains true that it is when the business interests immediately affected by legislation of any kind appear before the committee of ways and means of the house of representatives to explain to legislators intelligently and from experience what are the economic effects of legislation, past, present or prospective, on their personal interests, that the head waters of practical political economy are reached. If legislators can not find out what the effect of proposed legislation will be by inquiring of those whose interests it will affect, they can not find out at all. Whether these interests when known are of a kind which should be regarded rather than others with which they may conflict, is a question which addresses itself to legislative discretion. But of the fact that the most important source of enlightenment for a legislator is the testimony of the man upon whom his legislation is to act, there can be no doubt. It may be interested. But the adjusted aggregate of all private interests constitutes the public interest. It may be selfish. But the aggregate selfishness of a whole people brought to bear to secure their collective welfare, is patriotism.

The word "lobby" is an opprobrious word, while the sacred

* Guizot on Rep. Gov., pp. 466-477, 482-507, 513, 517.

right of the people to petition for a redress of grievances is the most popular and indestructible boon which the constitution affords. Yet there is no other name for the delegation of citizens which comes to the capital to make a petition concerning legislation effective than "the lobby." It is one of the contradictions between the purity of the ideal and the corruption of the real in politics, that the right of petition should continue to be the subject of profound reverence, while the men who exercise the right should be assumed to be almost of necessity engaged in influencing legislation corruptly. In fact, no influence is more useful or necessary to a legislature which is called upon to pass laws of a kind that bear upon economic values, as nearly all laws in some manner must, than that of the persons whose economic interests are thus affected. And, on the contrary, no doctrine is more pernicious in practice than the despotic notion that a legislature should approach its work with an ideal reverence for some cast-iron rule or so-called "principle," which is derived from some theorist of high repute, whether Aristotle, Adam Smith, or any other, and is so sacred that it is not to be subjected to critical analysis at the hands of all who feel that they will be injured by it.

Statesmen like Hamilton, Madison, Jefferson, Washington himself, De Witt Clinton, Gallatin, Calhoun, Jackson, Clay, Webster, Choate, Rollin R. Mallory, Silas Wright, Benton, Cass, Douglass, Lincoln, Hale, Seward, Chase, Thaddeus Stevens, Etheridge, Stewart, Sumner, Garfield and Kelley are, and should be, closely studied by American students for their economic opinions. The chapters bearing on economic topics in the writings of Hamilton, Horace Greeley and James G. Blaine, and in the speeches of the great debaters in Congress, form an inexhaustible mine of economic instruction. What practical men say, while under criticism, and in the presence of the enemy, and liable to correction, brings us nearer to the economic life of the people than didactic works are apt to do.

17. The United States as an Economic Instructor.—In America the author whose teachings are most original, influential, valuable and authoritative on all economic and social topics is the government itself, in all its enginery—national, state (including its machinery of elections), municipal and local. The census of the United States, compiled every ten years since 1790, the censuses of most of the states compiled in the intervening fifth year, or every five years, the debates in Congress, as published in the *Congressional Globe*, the messages of the Presi-

dents and the reports of the heads of departments, especially that of the treasury, agricultural bureau, and foreign consuls, the messages also of the governors, and reports of the state officers, and the debates in the legislatures of the respective states, the city councils of cities and the town meetings of towns, are the point of contact between the popular mind and practical political economy. England followed the United States in 1801, in taking a census. Besides these, the special investigations made and reports published by committees of Congress upon questions relating to revenue, coinage, banks, shipping, railroads, mining, canals, or other internal improvements, and the statistical reports of associations representing producers, supersede in interest and often exceed in economic applicability to our situation, and even in scientific value the purely economic discussions of persons who are removed from us by distance, time or lack of familiarity and sympathy. Facts and figures, however official or truthful, must be set in appropriate relation to all other facts and implications, or their use may still in effect, deceive.

Facts of every kind can be handled deceitfully, and made the means of misleading the unwary. This is especially true of the facts and omissions of the census.

Of some products the annual crop is given—of others the total stock on hand; many very extended and valuable products are omitted altogether. Mr. Carroll D. Wright has effectively called attention to the fact that in taking returns of capital invested in manufactures or other industry no returns are made of borrowed capital, and that in this manner the ratio of wages to capital and of profits to capital have both been overestimated. This, however, points only to a more perfect system of taking the census. The amount of exaggeration and misrepresentation which the census prevents is incalculably greater than that which it permits to exist.

Second only to the government of the United States in influence as a teacher of economic science is the American newspaper press. It has not wholly emerged from that youthful period in which discussion is carried on in a disputatious rather than in a scientific spirit. As a whole, however, its method is nearly as fair and not less intelligent than that of the writers of books. It is gradually learning that government, after all, calls for skill and study as well as mere honesty and patriotism. With all its shortcomings it may be truly said that while financial and economic questions, especially the tariff question, have seldom in the

American press been treated as ably as in Congress, they have continually been discussed by both Congress and the American press with a degree of wisdom and fairness far greater than any which have marked the English economists generally since Adam Smith. It has been unfortunate for economic science that it has been deemed a point of political good-breeding in England since 1846 to bow when the term "free trade" is mentioned as if it were the host, to lift one's hat as if it were the queen, and to shed tears of patriotism as if it were the flag. In fact it is only a mixed experiment, freighted with evils not easy to calculate. Its partial trial cost indeed the expatriation of millions of farmers, the fortunes of some, and even the lives of not a few of those of the poorer class. But so long as the prowess of the British army extends British markets adequately to keep British spindles going, the ruin of the farmers can be atoned for by the prosperity of the manufacturers. To perceive this has constituted the distinctive function of the Manchester school.

CHAPTER II.

WEALTH.

18. Wealth and Poverty—Social.—Wealth, in ordinary speech, is applied to a large accumulation of property in one person, or as brought into one point of view, as when we speak of the wealth of some one person, city or state. In political economy the term wealth expresses the abstract idea or quality wherein these large masses of wealth are identical, in substance, with the smallest quantity, though it be the sum paid to a laborer for a day's work, or by him to a restaurant proprietor for a meal. Wealth, therefore, in the economic sense, rejects the element of quantity which is associated with the term in colloquial usage, and retains only the quality wherein a small sum of wealth is identical with a large one. Wealth, in the colloquial sense, stands to wealth in the economic sense, as the term "ocean" does to the term "water," ocean conveying the idea of a vast quantity, while "water" is as fully met by a glassful as by a sea. So a bootblack's fee is as truly wealth, economically, as the largest estate.

Economic wealth would be the power to satisfy one's desires, provided desire were not in itself an illimitably expansive quantity, and therefore incapable of satisfaction in any absolute sense. Wealth is, therefore, a power to command the services of our fellow men. When these services are commanded by force only, as in slavery, and under barbaric despotisms, force becomes the chief source of wealth. Wealth then takes on the form of slave-owning, or seigniorage, or lordship, over many retainers, servants, henchmen, or soldiers. In commercial periods the exercise of force is relegated to the government and its army and police. Wealth then becomes the power to command the voluntary services of men by paying for them. In the degree that a man possesses much of this power he is wealthy. Possessing little of it renders one poor. But even the poor obtain all the material comfort they enjoy through such share of wealth as is theirs. Wealth, therefore, does not consist in commodities, services,

money, lands, or pleasures, but in the power to control them at will by compensation.*

Wealth may again be defined as the removal of poverty. Indeed if the logical, historical order were observed, poverty, as the antithesis and antecedent of wealth, would be entitled to the prior definition. Poverty is the condition of unsupplied want—of hunger, thirst, nakedness, destitution and inability to command the services of one's fellow men. It pertains to all human beings at birth, except in so far as law, originating in parental affection, may have invested them with a title to the affectionate care of their parents, or to certain rights to inherit property from their ancestors or relatives. It is the characteristic of all nomadism, like that of the Australian natives, and of all savageism. It diminishes with barbarism—the drift toward civilization being always proportionate to the growth of the wealth of the aggregate society. Civilization is the intellectual aspect, or name, for the same increase in the complexity of individual rights and powers, and the same development of personal liberty, relatively to communal, tribal or state power, of which the growth of capital, or wealth is the economic aspect, or name.

---

* *Adam Smith* ("Wealth of Nations" by McCulloch, p. 13), says: "Every man is rich or poor according to the degree in which he can [or can not] afford to enjoy the necessaries, conveniences and amusements of human life. But after the division of labor has once thoroughly taken place, it is but a very small part of these with which a man's own labor can supply him; the far greater part of them he must derive from the labor of other people. And he must be rich or poor according to the quantity of that labor which he can command, or which he can afford to purchase.

H. C. Carey says wealth consists in the power to command the ever gratuitous services of nature.—*Soc. Sci., by McKean, p.* 100.

Bastiat ("Harmonies of Economics," tr. by Stirling, p. 181), says: "The vulgar employ the word wealth in two senses. They say 'the abundance of water is wealth to such a country.' In this case they are thinking only of utility. But when one wishes to reckon up his own wealth, he makes what is called an inventory, in which only commercial value is taken into account.

"With deference to the savants I believe the vulgar are right for once. Wealth is either actual or relative. In the first point of view we judge of it by our satisfactions. Mankind become richer in proportion as they acquire a greater amount of ease or material prosperity, whatever be the commodity by which it is procured. But do you wish to know what proportional share each man has in the general prosperity? In other words, his relative wealth. This is simply a relation, which value alone reveals, because value is itself a relation."

Roscher seems to use the term "goods" for "wealth," and says: "Goods are any thing which can be used, whether directly or indirectly, for the satisfaction of any true or legitimate human want, and whose utility for this purpose is recognized." ("Pol. Econ. by Lalor," vol. i, p. 53; chap. 1, sec. 1.) He therefore defines economy as the systemized activity of man to satisfy his need of external goods.

Henry Fawcett ("Manual," p. 6), says: "Wealth may be defined to consist of every commodity which has exchange value."

Mr. Carey's definition of wealth as "the power to command the always gratuitous services of the great forces of nature" is excellent when understood in Mr. Carey's sense, and may be broader and more philosophical than that we have adopted ; but it involves much study to comprehend, and its full meaning grows upon the mind only gradually, as it does in the class of truths called mystical. The word nature came into the English language with a religious meaning, as distinguishing what a man is at birth in contrast with what he becomes by grace or divine (*supramundane*) influence. From this it passed to mean the constitution which all things have under law, as distinguished from changes they may take on supernaturally. In both these old senses man is a part of nature, and in the first of them nature is the whole of man.

Gradually nature, which at first had meant what man was at birth, (from *natus*, born) came to be used by some as meaning the world exterior to man,* to which the root meaning of the word nature, viz., birth, has no application. Whatever there be in man, which obtains command of the forces of exterior nature, must of course

---

John Stuart Mill defines wealth as "all useful or agreeable things which possess exchangeable value, or in other words, all useful and agreeable things except those which can be obtained, in the quantity desired, without labor or sacrifice."

Jevons ("Primer," p. 13), says wealth is "what is transferable, limited in supply, and useful." *Perry* rejects the term wealth. *George* ("Progress and Poverty," pp. 34–37), says it is natural products modified by human exertion, so as to gratify desire.

Henry Sidgwick ("Pol. Econ." p. 71), says: "The wealth of any individual is considered to include all useful things—whether material things, as food, clothes, houses, etc., which, being at once valuable and transferable, admit of being sold at a certain price."

Adam Smith again ("Wealth of Nations" by McCulloch, p. 14), says ; "Wealth, as Mr. Hobbes says, is power. . . . The power which that possession immediately and directly conveys to him is the power of purchasing a certain command over all the labor, or over all the produce of labor which is then in the market. The exchangeable value of every thing must always be precisely equal to the extent of this power which it conveys to its owner."

Roscher (vol. i, chap. 1, sec. 9), says : "The possession of large, and also of potentially lasting resources; objectively such resources themselves we call wealth. But it must be large in a twofold sense, large as compared with the rational wants of its possessor, and large also as compared with the resources of other people. If all men were possessed of a great deal, but all of an exactly equal amount, each would be compelled to be his own chimney-sweep, scavenger and bootblack ; and how could any one then be properly called wealthy?"

A New York financial journal entitled *Wealth* adopts the following well considered and apt definition : "Wealth is that positive and substantial share in the good of fortune which distinguishes an individual from his neighbors by putting him in possession of all that is commonly desired and sought after by man."

* It is so used in the title of Mr. George P. Marsh's book, "Man and Nature," a treatise on physical geography as influenced by human action.

be part of man's nature. It is not, therefore, a contest between man and nature, but between nature in man and nature exterior to man. The forces which wealth aids man to control are, perhaps, "the great forces of nature." But the forces, in man, which do the controlling, must be still greater forces in man's nature, or they would not control. Hence, minds educated in certain schools of thought, repel as ill-conceived and incongruous, the attempt, in a definition designed to be exact, to treat "man" as being one distinct entity and nature another.

Another class of minds asks, "Why do we need any aid to command services which are rendered gratis?" They do not merely ask this question, but they find themselves unable to answer it. This inability renders it necessary to translate Carey's language into the dialect in which other minds think. When it is so translated it seems to mean that wealth is the power to obtain by exchange or payment such services on the part of other men as will bring within the reach of one's own enjoyment those properties of matter which, though at some time or place imparted to matter gratuitously, yet can not be enjoyed by me without the services of my fellows. Confessedly coal, iron, wood, wheat, wool, potatoes, flour, and the life that is in plants, animals, and our fellow men, come to society at large as the gratuitous gifts of nature. The fragrance and flavor of tea, wine, venison or game is the gratuitous gift of nature. Even the sharp flavor of the pepper with which we season the venison is the gratuitous gift of nature. This is all that we enjoy. We do not enjoy the labor the Chinaman performed in carrying the tea over the mountains on his back; nor any other of the labor necessary to place the tea or pepper or game on our table. Yet we pay for the labor and get the enjoyable properties gratis. Hence in the closest analysis we get what we enjoy gratis, from nature, by paying our fellow men to bring it to us. Hence, also, what we pay for seems to form no part of what we enjoy, but it is the means of getting it.

Man makes no property of matter or force which his fellow man can enjoy, whether it be the light of the stars, the hardness of ivory, the beauty of gold, the glint of the diamond or the warmth of fur. But men's toil makes the telescope, the paper knife, the coin, the solitaire, and the sacque. Hence while the properties we enjoy come gratis to society as a whole, they come to him who enjoys them, as wealth, only through his own labor or the labor of his fellows, and by exchange. Nature having affixed impassable limits to each man's power to consume, and not hav-

ing presented to any man all he needs to consume, the surplus of one man's product must be forwarded to supply the deficiency of another.

Wealth, therefore, is that power in me, however and whenever obtained, which gives me command through the services of my fellow men, which it enables me to pay for, of all those gifts or services, which nature brings gratuitously to some member of society, at some time or place, but which only through his toil or that of others, is brought to me.

Mr. Carey, however, correctly defined wealth as a power in man, as compared with Mr. Fawcett, who defines it* as a commodity, and therefore a physical object. If a commodity were intrinsically wealth, it would remain wealth in the same degree in whosesoever hands it might be. To say that it is such a commodity as has exchange value is tautological, as it is the fact that it has exchange value which makes it a commodity. To be a commodity it must commode or accommodate or meet the wants of somebody. The question whether a thing is a commodity, therefore, depends on whether it is wanted. But when we define commodity as a thing that is wanted, it is plain that the point that determines its being a commodity is not any quality of the thing itself, but the state of desire in the mind of the person who wants it. Want therefore stands as the antithesis of wealth, and wealth is the power to remove or satisfy wants. One might define want as "the thing we desire," and the word is so used when we say of a book "it supplies a long-felt want." Now if we also define wealth as "the thing we desire," which is the outcome of Mr. Fawcett's definition, it will happen that wealth and want, while opposite in meaning, will be defined in the same terms. Both will mean the things we need, whereas wealth expresses the fact of our having them, and want the fact of our being without them. It is clear that the wealth and the want alike express our condition or attitude, either of power or of destitution. As satiety and hunger do not consist in "eatable food," though they do define our attitude toward them, so wealth and poverty can not consist in exchangeable commodities, though the first implies our possession of them, and the latter our lack of them. Besides, when the true idea of wealth as a *power* on the part of its possessor is grasped, it becomes evident that it must be extended impar-

---

*"Manual," p. 6. "Wealth may be defined to consist of every commodity which has exchange value."

tially to all kinds of power, so far as they enable us to control the property, services, time and destinies of our fellow men, whether they are exercised through the medium of physical objects or mental ideas or social affections, or are exchangeable or not.

When the Chicago *Tribune*, in the fire of 1871, was burned so that not a vestige of property, unless it may have been the subscription and account books, remained—neither of which had any exchangeable value as commodities, the concern was still worth a million of dollars as indicated by the price which its shares of stock commanded. All this wealth was good-will, but good-will is not an exchangeable commodity. It could not be transferred at pleasure by the *Tribune* to the Cincinnati *Commercial* or the Chicago *Times*. It pertained to the Chicago *Tribune* Company only as proprietor, and is wholly distinct from the shares of stock in the company, which belonged to the several shareholders, and were exchangeable.

The highest elements of wealth do not always exist in a form in which they may thus be seen to have an economic value without being in the least exchangeable. Yet a judge's reputation for integrity on the bench, a clergyman's reputation for purity, a manager's reputation for successful enterprise, an author's repute as entertaining, a philosopher's fame for profound generalization, indeed, all modes of intellectual and social power give their possessor a command over the services, destinies, and material commodities of others, and are therefore not only wealth but capital, and yet are not exchangeable. Character, religious faith, moral influence, courage, sagacity, rank, titles, political office, a chair in a university as an instructor, all are wealth, but not exchangeable.*

It is even conceivable that in certain conditions of society great wealth, or power to command services, might exist without any commodities whatever, and without a solitary exchange. In the communities of ants, bees, and beavers great social power is manifested, and in some way association and co-operation on a scale much larger numerically than is known among human beings occurs, and yet no individual among them ever makes an exchange of commodities with another.

These communities arrive at the same facility of co-operation without exchange that man arrives at by exchange, so perfectly that among the ants, according to Sir John Lubbock, each mem-

* This view sustained in substance by Sidgwick, "Pol. Econ.," 90.

ber of a community of twenty thousand knows personally, and can distinguish every other member of that community from a stranger of the same species.

In a thoroughly socialistic state, like the Mormon state, and within every socialistic order like the Catholic monastic orders, the Shakers, or even in the mutual co-operation of the servants of many great corporations, there are no exchanges, but there may be great power to command goods and services.

It would be conceivable that a despotism like that of Egypt in the pyramid building period may have developed vast power in its ruling class over the services and goods produced by the whole people, and vast power to produce goods and compel services, without even permitting a single trade to be made between any two persons. In such a case great wealth might exist, but no commodities would be on sale. Subordination and coercion would perform the functions which in our commercial age are performed by exchange. Those, therefore, who make wealth consist in exchangeable commodities, grasp only a quality which is incident to wealth in a commercial period ; which is partial, and may be evanescent. Those who define it as *power* seize upon the element in it which is eternal.

19. Savage Life, Social Poverty.—Savage life is usually conceived of by people in civilization as a condition of feebler intellectual grasp, of lower cranial development, weaker moral tendencies, and more bloodthirsty social disposition, combined with greater animalism than that which prevails among civilized people. The jurist sees in it a feebler development of law, the theologian regards it as an erroneous manifestation of faith, or debasing consequence of superstition, the moralist recognizes its essential identity and parity with vice and crime as they appear in civilization, the educator attributes it to lack of acquaintance with literature and science, but the economist recognizes all savagery as arising from the utter and complete absence of wealth or capital, and consequent lack of organization of an industrial or working society. This contrast between the poverty of savage nations and the wealth of civilized, seems by many economists to be described as an incident of savage life rather than recognized as its essence. It should, however, be more pointedly stated that the lack of wealth in its broad sense is the essence of savagery, and that every man would become a savage in the degree that the means of living in civilization were denied him. As his ability to maintain his wife and family in comfort slide away from under

him, his domestic affections are changed to coarse and brutal rudeness. Stripped of his clothing, the virtue of decency becomes impossible. Take away his bread, and to a starving man, the law even excuses theft, because it knows that nothing else remains. As Schiller says:

Etwas muss er sein eigen nennen,
*Oder der Mensch wird morden und brennen.**

This truth is expressed by the maxim, "Self-preservation is the first law of nature," meaning that no other law can restrain a savage from any act which he deems adapted to save himself either from destruction or from suffering. Destroy his private title to his home and he not only becomes a wanderer like the Arab, or gipsy, but almost of necessity a plunderer and thief. The growth of wealth, therefore, is simply the economic aspect of the growth of civilization.† Even the degree of evolution which

---

*Man must claim something as his own,
Or he will either kill or burn.

† *Fawcett*, p. 7, says: "The most striking variations in wealth are exhibited by the same nation in different ages, and by different nations in the same age. There was a time when England was as poor as any country which is now consigned to the wandering savage, and yet she possessed then those same natural resources which now so materially contribute not only to form but to sustain her present wealth. . . Each stage through which progressive nations have advanced from barbarism to civilization, is preserved at the present time in some parts of the globe. The savage still exists who lives by hunting and fishing. . . These great differences in wealth are partly due to physical causes, but they depend mainly on social circumstances, etc."

Adam Smith says (p. 1), of savage nations: "Such nations, however, are so miserably poor that from mere want they are frequently reduced to the necessity sometimes of destroying and sometimes of abandoning their infants, old people and those afflicted with lingering diseases, to be devoured by wild beasts. Among civilized and thriving nations, on the contrary," etc.

Dr. Carey in "Past, Present and Future," p. 414, says: "Civilization has in all ages and countries been found where men have accumulated wealth, by means of which they have been enabled to subject to cultivation the rich soils of the earth; and it has disappeared as they have been forced to fly to the poor soils of the hills for safety." "With the division of land and the diffusion of wealth the power of the few tends to diminish . . and moral feeling improves because of the increased facility of obtaining the necessaries, conveniences, and comforts of life. Improvement and a tendency toward perfect equality of moral feeling are therefore characteristics of civilization. With each step in this progress, jealousy and avarice disappear and woman becomes the companion of man and ceases to be his slave, . . parents cease to be tyrants and children respect and love them, and he becomes more and more animated by hope . . learns more and more to appreciate the comforts indicated by the good old English word *Home*, and more and more to find in the great command to 'do unto others as he would that others should do unto him,' the guide of all his thoughts, his feelings and his actions." Again, (p. 427), he says: "The past says to the people of the present--civilization comes with wealth and the cultivation of the rich soils."

exists among savages is measured by their capital. Those which have no bows or arrows, slings, darts, or weapons, subsist on worms and bugs and vermin. Those which have these first elements of capital, live upon fish, flesh, and fruits. Those which have flocks of cattle among the North American Indians are far in advance of those which have none.

20. Ownership by the Tribe.—(Barbarism.) While society is emerging from the savage state all ownership of property is in the tribe and asserts itself at first about equally as to persons, personal property and land; *i.e.*, at first each person is owned by his gens, clan or tribe, which claims his services, communally and socially, to the extent that it needs them. There may be a condition anterior to this, of absolute anarchy, or absence of all government and of all property, where no person belongs to or knows of any tribe or clan, and no rights are asserted. The native Australians are alleged to be of this low type, without tribe, property, or title. Each man is—

"Only a pauper whom nobody owns."

Savage life generally, however, is tribal, and recognizes the tribe as owning in common for all its members, both goods and land. This socialistic ownership does not arise from generosity, for such a feeling hardly exists, but from the consciousness that nothing weaker than the aggregate strength of the tribe can secure, or assert, or protect a title to any thing. Freedom has not yet developed to the point where an individual can own any thing, because brute force has not yet given place to law in the degree required before a private person can defend or sustain ownership in any thing, or court of law can exist. Roscher (Polit. Econ. vol. i, sec. lxxxiii,) declares that "in all the lower stages of civilization, a community of goods exists. Out of this condition private property is evolved only as well-being and culture have been evolved, private property being at once the cause and effect of such well-being."

The North American Indians own all lands only as tribes. To fence lands, for private ownership, is to them a dangerous monopoly, fatal to the business of hunting and fishing. At first, under

---

Wolowski (Introduction to American Edition of Roscher's Pol. Econ., p. 20.) says: "The increase of production then appears as an instrument of elevation in the moral order. It is energy of soul, intelligence and manly virtue which constitute the chief source of the wealth of nations; which create it, develop it and preserve it. Wealth increases, declines and disappears with the increase, decline and disappearance of these noble attributes of the soul."

the Roman law, all private appropriation of land on rivers and coasts was subject to the anterior rights of fishermen to take so much land as they needed for cleaning fish and mending and drying their nets. But, in the United States, the fisherman's right has become subordinate to the private right of the adjoining owner. Roscher (above cited) says: "Diodorus describes community of goods and of women as existing among the Ichthyophages on the Red Sea, who lived in caves, went naked for the most part, plundered all shipwrecked people, and never reached an advanced age." Strabo says the same of the Scythians, Plutarch of the early Spaniards, Dio Cassius of the Rhetians, Isocrates of the Triballi. The Caribs also had community of goods, performed all their work in common, ate at a common table and had common stores and supplies. (Petr. Martyr, Dec. vii, 1; Rochefort, ii, c. 16.) Among the Kuskowimers of Russian America, all the able-bodied men of the tribe live together. (*v. Wrangell*, Nachrichten, 129.) Among the inhabitants of the Aleutian Islands, in times of scarcity of food, the product of the fisheries is divided according to their need.

"The hospitality of the inhabitants of the Friendly Islands borders on community of goods. (*Mariner*, Freundschaftsinseln, 75, 81.) So also among the Eskimaux. In Mexico the Spaniards found land ownership among the most distinguished of the natives, but only a species of possession in common and common storehouses among the peasantry. (Robertson, "Hist. of North America.") In Peru they found an advance on mere village or tribal communism, viz., state socialism—a partial community of goods presided over by the state; a yearly division of all lands among the people in proportion to their rank; the cultivation of these lands in common, under the superintendence of the state and to the sound of music. Both Peru and Mexico, however, were relatively poor. Peru had only one city, no beasts of burden, no plows, no trades, no commerce. In Mexico the farming was so slender that the advance of the little army of Cortez produced a famine.

The Spartans under the constitution of Lycurgus had community of goods, meals in common, public education, the authorization of stealing, the prohibition of trade, of the precious metals and of fine furniture, the equal division of property, land made inalienable, etc. The Tcherkesses of Circassia consider robbery honorable provided the robber is not caught in the act. (Bell, Journal, etc.) Similar notions prevailed in ancient Egypt relative to their or-

ganized robber bands, which were socialistic within and predatory without. (Diodor., 180.)

21. Tribal Ownership Depends on Occupancy and Use.—In this early period of socialism or communal ownership of land, so far as private right to land begins to exist at all, it usually depends on its private possessor improving, tilling or occupying it. The United States have usually made occupation and residence on government lands by a settler a condition to his gaining title. All systems of law give preference to an occupant over one having no title, as is indicated by the familiar maxim, "possession is nine points in the law." "Mining titles in California and Australia rest on possession, and are lost in a brief time if the mines are not worked ; so Roscher says (Political Economy, sec. lxxxviii): "This is the practice in Taway (*Ritter*); and also in ancient Germany (*Grimm*). Right of the 'dead fire' in Spain and Portugal during the middle ages (*S. Rosa de Viterbo*). In many parts of Persia, the land belongs to any one who has provided it with water by canals or wells. (*Fraser*, Journey in Chorasan, ch. 7.) Especially after the Mongolian devastation about the beginning of the fourteenth century, it was decreed that land that had remained uncultivated for a long time should belong to the person who made it productive. (*d'Ohsson*, "Hist. des Mongols," iv, 418.) In the time of the ancient Persians (Polyb., x., 28.3) the harvest for the first five years belonged to the person who first irrigated the land. On the Upper Euphrates likewise the land is very often neither sold nor leased. Any one who will till it and pay one-tenth of the produce to the bey may have it for nothing. (*Ritter*, x, 669.) So, too, among the Fulah and Mandingo negroes, and even among the Tscherkessans (*Klemm* "Kulturgeschichte," iii, 337). Theodosius and Valentinian decreed that deserted fields should after two years cultivation belong to the possessor (L. S. Cod. Just., xi, 58)."

22.—Tribal Precedes State Ownership.—In Europe, and especially in England, rights to the forests, to pastures, to gather turf, and to take fish remained in common long after the arable land had become private. Upward of two thousand acts of parliament were passed for converting the land, that had been commons, into private titles by inclosure, and such acts were deemed necessary to admit of the cultivation essential to a more dense population. In Germany the change covered the first half of the present century. In Russia the communal ownership still applies to the greater part of the lands. In Congo and on the Gold

Coast of Guinea, says Roscher, "the land in whole villages is tilled in common, and the harvest distributed among the families per capita. Wherever absolutism reigns, the prince is also the owner, (in his capacity as prince) of all the lands. (*Klemm*, iii, 337.) In China, where the original tenure in common of the land by all was broken through in the third century before Christ, all the land of the country now belongs, strictly speaking, to the state, and the possessor of land who permits it to go untilled is punished. (*Plath*, in the *Phil. Hist. Sitzungsberichten der Munchener Akad*, 1873, 793 ff.) In Corea, private property in land is unknown. Arable land is divided by the state according to the number in a family. (*Ritter*, vi, 633.) The example on the largest scale of a country without private property in land is the British East Indies. (*Ch. Campbell*, System of Land Tenure in Various Countries, Cobden Club Essay)." But when law has become so far developed as to protect private ownership in land, the communal has never been preferred to the private, by any race or people, on the ground of its greater productiveness, or more equal diffusion of comfort.

23. Charitable and Religious Communism.—In a few instances persons actuated largely by a religious or social enthusiasm have preferred the communal to the private system, but it has seldom been claimed to be preferable by persons seeking only to better their material condition. Those who have reached backward toward the communal system have usually been persons who had seen little of its working, but whose moral feelings were shocked by the inequalities and hardships incident to the struggle for subsistence under the system of individual property, which is necessarily that of free competition, softened by social and state aid to those who fail. The community of goods of the first Christians at Jerusalem (James i, 1) was recommended as a scheme of charity, and not as an economic scheme of production —an act of love, but not a right which the destitute could assert (Acts v, 4), and it extended to the use only and not to the ownership. (Acts iv, 32.) "Spite of all this," says Roscher (Political Economy, sec. lxxxi), "it produced a chronic state of poverty in the church at Jerusalem, which Paul had to meet with collections taken up on all sides, without, however, anywhere establishing a similar institution. (Romans xv, 26; 1 Corinth. i, 16.) Among the Christian fathers many like Chrysostom and Clemens recommended community of goods on economic grounds. Three centuries of the experiment demonstrated, however, in Judea, Greece, Alex-

andria, Spain, and Italy, that the more expert the pleadings of the church became for the means to provide for the poor, the more intense became the poverty against which they were everywhere powerless to provide. Community of goods, cattle and land was practiced among the first settlers in New Haven, Massachusetts Bay and Pennsylvania (*Roscher, id.*), and Virginia, but Bancroft says (1 History United States, 16), as much work was performed in a day after the system was abandoned as was done under it in a week, and as much by three workmen as previously by thirty. The Catholic Church, in its priesthood and orders, owns its property as a commune, though the government of the commune is monarchical. It is the most numerous and wealthy socialistic organization in Christendom, and proves that socialism in ownership does not imply equality of individuals in control.

24. Relative Inducement to Effort under both Systems.—The difference in the strength of the two systems, social and individual ownership, as stimulants to endeavor, may be seen at once in the family. A family exhibits the social system, and admits the right of each of its members to all he needs for his welfare. Every child knows that it costs to maintain him from one to two dollars per day, but this would not incite him to special effort, because he feels that, whatever is the cost of his support, he is entitled to it, and it will come, whether he puts forth any effort or not.

When, therefore, a parent wishes to urge his child to special effort, he makes no account of the dollar or two he daily expends in the child's ordinary support, but promises him as wages perhaps a quarter of a dollar, and is sure of his child's utmost effort. A small wage, earned with the feeling that it is our own, and that we have free choice whether to earn it or not, is more stimulating than a large dividend guaranteed on socialistic principles, whether it be issued on the basis of general merit, need or past services.

Among barbarous races all ownership is tribal, and not individual, the tribe being in this stage of development the only power strong enough to protect and defend a title. Private ownership only evolves as law, and juridical or law-derived notions of right and wrong become sufficiently strong to protect a title in the individual.

25. Wealth Dependent on Exchange.—How Far.—Wealth exists long before exchange exists. Indeed, a very considerable organization of labor by force or slavery might endure for a long period without exchange, the central despot or social

governors regulating by orders what each subject should do and receive, and the latter accepting such dictation as the substitute for the present mode of inducing labor by money. Within the family, and indeed within all organized gens, communes, communities, armies, corporations, tribes, or clans which practice community of land, goods, or services, the aggregated will or executive judgment of the chief becomes a substitute for wages and for exchange, in the sense that each member of the community renders many services to the other without payment in any other form than as he profits by the success of the commune, tribe or clan. If we should conceive of an entire nation as being organized in this way, and if the experiment were successful in that it provided for the wants of all as successfully as the present system, it is evident the wealth would be as great as it is now, since all would command in an equal degree the services of others, but no exchanges would occur, and the distribution of wealth would take place on a basis of agreed ratios or, in effect, of rank. No values would exist, as none now exist within the family, and nothing would have exchangeable value. In the government post-office, for instance, the earnings of the aggregate force are expressed by the aggregate sum received for postages, which is distributed according to the salary schedule. But neither member of the force earns any thing save as he is assisted by the others, since no one carries a letter to its destination. There is therefore great co-operation in labor to the same end, but no economic exchange of services. As the only function of wealth is to induce co-operation in rendering services, and as this may be done by authority, slavery, rank, affection or socialism without exchange and without the element of value being the basis of co-operation, we can not agree with the many who hold that wealth consists only of exchangeable values, nor with the socialists who imagine it would improve present conditions to return to the tribe. Wealth, however, may consist of that very power over the services of others, obtained through chieftainship or official place, which employs and commands all without performing any act of exchange whatever. It can, perhaps, be said that with the growth of civilization private wealth comes more and more by exchange, and less and less by force, authority or compulsion, or by rank which is the outcome and consequence of these.

26. Private or Individual, Including Corporate Wealth.—Persons who compare America with Europe observe that in the former the individual is more—the govern-

ment is less. In the latter only the government, or those closely identified with it either as state or church, show wealth. In America wealth characterizes the home and the person. In Europe it marks a palace or the dignitary. But in Europe in modern times the diffusion is greater than anciently, or than now in most parts of Asia. As civilization advances wealth vests more in the individual. It takes the form of habitations which are not mere places of shelter, but edifices erected with a view to architectural style, artistic effect, and extended hospitality. They are surrounded by imposing parks and grounds, and conservatories for the cultivation of rare plants and flowers. They become schools for the manifestation of the æsthetic sense. Inside the rooms are made suggestive of travel and mental range by souvenirs and *bric-a-brac*, by paintings, engravings, frescoes, and diversified and durable furniture. Music, literature, and art elevate the tone, by enlarging the possibilities of enjoyment, in these homes, and the extent and diversity of the tastes to which they minister.

In America also, where private wealth has reached a degree of development never before or elsewhere known, the shops of trade and manufactories of goods, the great office buildings for rental and hotels for the accommodation of guests, as well as railway cars for their transportation, become indices of individual wealth applied to social or industrial uses. They overtop, in luxurious appointments, those expenditures for the purpose of indicating rank or sovereignty, which in earlier periods or in countries of less rapid growth in private wealth, have been possible only to the state. The growth of private and personal wealth is the economic aspect of the increase of private and personal freedom, of private and personal intelligence, independence of thought and the free and untrammeled exercise of private judgment. In proportion to the number who attain this condition the coercive function of the state disappears and, in a certain sense, it may be said that the number of those who could do without the state increases. The state, meanwhile, adapts itself to these new conditions by diminishing its coercive, and enlarging its attractive and instructive, functions. Its armies lessen as its schools increase. Its navies decline as its industries multiply. It builds fewer gibbets but sends out more committees of investigation into the economic causes of suffering. It prizes wealth itself less and life and man more. It punishes fewer crimes with death and studies and debates whether society has not in some way erred toward the pauper and the felon. Every cause which is believed to stand iden-

tified with a larger altruism and truer benevolence is sure of efficient revenue from the spontaneous offering of a more than satisfied egoism. Hence, in countries where there is a large diffusion of individual and private wealth, the effective organization of charities becomes a means of revenue to their originators and conductors, so sure and ample that the most vigilant measures are required to prevent the mercenary from resorting to schemes of philanthropy as affording a larger profit than those of productive industries.

The combination of individuals in capitalized corporations adds to the power which wealth possesses in the hands of a private person, the immense advantages of perpetuity, a government of checks and balances, a deliberative council for the guidance of enterprises, and an executive headship selected with reference to skill and personal capacity for command in industry. Freedom from a part of the personal risk on the part of the corporation has also had its influence in promoting the tendency to place all complex and influential industries in the control of corporations. From these, and other causes, from two-thirds to three-fourths of the individual wealth, productively employed by the people of the more advanced nations, is managed by corporate companies. This intensifies its activity as compared with its control by individuals in a degree as great as that which accompanied its earlier transition from communal to private property. The corporation is by as much a more intensive productive agent than the individual, as the individual is more productive than the commune. The individual has many whims and caprices to gratify besides the sense of profit or the specific end, whatever it may be, of corporation. He seeks wealth and profit more singly and absorbingly than the commune, but less assiduously than the corporation. The corporation can be held absolutely to its one purpose night and day, year in and out, without caprice, diversion, amusement, or dissolution. In productive uses it supplants and survives in competition with the individual, for the same reasons that the individual supplants the commune. A higher and finer stage of law is essential to corporate ownership than to individual. But, given the stage of legal protection adequate to render its existence possible, it supersedes the individual whenever energy, skill, and power are conditions of success. Corporate wealth, therefore, is, in its title, the most intensified and subtle form of individual wealth, and that which carries private right over productive property to its highest stage of dominion. Through the

corporation an individual may securely invest in business and industries of which he has almost no knowledge, and may thus give effective aid to many enterprises without the labor of mastering their details. At the same time, through the ordinary security he feels in that judgment of character which all men practice, he can exercise his just share of influence over the managers of these great trusts, and so may still invest wisely, where if it were an individual instead of a corporate enterprise, he would be investing ignorantly.

While corporations pursue wealth more singly than individuals, they are also permitted by their longer tenure and divided risk to pursue it more patiently as to time, with a smaller need of clutching immediate returns, and more broadly as to means where that which is to-day a means of sowing may be in the future a means of reaping. Hence, on the whole, corporations, while more single in their devotion to gain than individuals, are also frequently more generous in their methods, more peaceful, more dispassionate, and less despotic in the exercise of authority.

27. The Commonwealth.—In the advance toward civilization the wealth that is common to the whole state, and ordinarily not exchangeable, increases absolutely, though it declines relatively to that of individuals. Public roads, rivers, canals, seas and bays, navies, fortresses, custom-houses, public schools, court-houses, prisons, jails, hospitals, poor-houses, work-houses, libraries, parks, streets, canals, markets, docks, light-houses, capitols, pavements, sidewalks, sewers, gas fixtures and sometimes the works for gas manufacture, treasuries, mints, mines and lands are a formidable fund of common wealth whose power does not lie in its exchangeable value. In monarchical countries the royal parks and palaces and crown lands, pictures and jewels, and in countries having an established state religion, the churches and monasteries are state property.

Society has two concurrent forms, the state life and private life. The former is socialist, *i. e.*, in all that concerns state life the state is regarded as controlling the individual. The latter is individualist, and within this sphere the individual is left, at least for the present, uncontrolled by the state.

It would not be doubted that a very great revolution must occur in human thought before it would be regarded as within the province of the enlightened state to determine whether, and whom and at what age, a man should marry, what should be his

course of diet as to food and drinks, apart from intoxicating stimulants or poisons, what should be his style or cost of clothing or its materials, where he should reside, or how much property he should be permitted to accumulate, what should be his occupation, or how much he should be permitted to charge or receive for his services or commodities, or how many children he might have, or how much property he must have before having any children, or how, short of the use of undue violence, he shall maintain the order of his household, and many similar things. Each of these points has, however, been made the subject of exterior social regulation, either by the state or by the governing power, in communities formed on the socialist basis.

In the modern state, the citizen is not in practice subordinate to the commonwealth in all things, but has reserved rights which it is one of the functions of the commonwealth to respect. By this it is not meant to assert that the commonwealth might not in the course of its evolution change into one of a different sort, which might oust him of these supposed reserved rights. But this contingency is remote. Nor is it meant that there is any legal limitation on the powers of the commonwealth in these cases, but only a consensus in behalf of the inexpediency of its exercise.

The right of the state to the unlimited service of the citizen in war, and the right of the state through its sheriff and county officers to call upon the *posse comitatus* or power of the citizens of the county generally to aid him in executing process, are surviving relics of state socialism, as to the person. The exercise of the power of eminent domain, or the right to take private property for public use—as for forts, for the supply of an army in war, for all public buildings, roads or ways, is also an assertion of state socialism as to property. The collection of debts, the punishment of slanders, assaults and crimes, and the compulsion of persons by law to perform certain duties toward others, as of parties to perform contracts, of parents to support or educate their children, or husbands to support their wives, and the exercise by the state of superintendence over marriage and of the power to grant divorces is an assertion of state socialism as to the conscience. The support of the poor and of convicts by enforced taxation, and in return the power exercised by the state to hold paupers and convicts in enforced labor or state slavery, are the continuance of state socialism in those respects. The tribal relation, as it exists among savages, lies folded up and dormant, as it were, within the civilized state, ready to restore savageism, commu-

nism, anarchy and slavery, in the form of prisons, jails and workhouses, gallows, transportation and colonization among savages, to all whose conduct exhibits that they are still in the savage state.

Crime constitutes such an exhibition. It matters not that crime results from destitution or incapacity to accept the restraints of civilization. The criminal by his crime expresses his preference for the tribal relation, and by his punishment he is remitted back to that which he prefers. To steal is equivalent to saying: "I would that all property were held in common," which is the tribal condition. To be arrested and have his arms pinioned is to come under the brute dominion of the strong, which is also the tribal condition To commit rape or burglary, arson or murder is to say: "I prefer the savage life to the civilized." To seize and punish, shoot or hang the ravisher, burglar, incendiary or murderer is to say: "Society meets you on the plane that you prefer, that of brute force." It can not be said that these brute punishments are either very deterrent from crime or very reformatory to the criminal. But they are extremely logical.

Equally logical, and far more reformatory to the criminal, is the system of colonization of criminals in new countries. In Job the transportation of criminals is mentioned. In Rome deportation to an island was so familiar, that a law was passed to limit it to cases in which a trial in comitia had occurred, which by translation into Magna Charta became the origin of our trial by jury. All European countries, during the period in which they had charge of the colonization of the new world, used the latter as a place of banishment for their criminals. England continued the custom to a late date in Australia, and with marked success as a means of reform. Assuming that crime as well as pauperism indicate that inaptness and unfitness for the restraints, complexities and intensity of industry which distinguish civilized life, the natural remedy would be to remove the criminal or pauper to an environment where greater indolence of life and laxity of morals would be tolerated and where the conditions of life would be simpler and existence would involve less toil. This is done by deportation to savage lands where the climate is not severe and where the soil is good. Among savages, and compared with them, one who would be, in civilization, a criminal or an anarchist, would be likely to be changed into an advocate of government, law and virtue.

Criminals in our penitentiaries, and the poor in workhouses, are treated to far better and more abundant fare than is usually

secured by savages in the hunter state. The savage obtains his food with great irregularity, sometimes having little or none for several days and at other times eating at one repast what a civilized man would divide between three. Convicts and felons are more regularly and wholesomely fed, are infinitely better housed, clad, instructed and are in a condition of greater security from danger, less liability to bodily harm, and of kinder general treatment even from the most unfit or cruel keepers than savages usually award to each other. Notwithstanding the natural indolence of the savage and the fact that he works only under the immediate pressure of danger or hunger, such is the constancy of both danger and hunger that it is doubtful if the average savage does not work more continuously and severely than the average convict or pauper.

Under whatever system employed it is a work of great difficulty and requiring rare skill in management to render either convicts or paupers self-supporting. Of all the prisons in the United States only four or five attain this result. The cost of support of the prisoners averages about forty cents a day, after prisons and other conveniences are built and machinery provided. The system of letting their labor by contract to manufacturers who can use unskilled labor is probably the more usually economical, while that of introducing workshops and selling the products is more educating and reforming.

28. The Family, and its Wealth.—In the earlier stages of society the family relation merges into that of the tribe and both merge into that of slavery. All three contain in so nearly a like ratio the elements of communism, socialism and anarchy, together with the germs of government, that writers have been prone to find the origin of all government at times in the Patriarch, at others in the chief, and again in the great owner of men-servants and maid-servants, flocks and herds. The three are not generically distinct. Under the Roman law the power of an owner applied to the father over his children, male and female, until he died. A Roman citizen, in the absence of a direct act of manumission, would still, with his household and goods, be the property of his father in theory, even though he might have risen to the highest offices in the state, or might be in command of armies. The husband owned his wife in as complete a sense as he owned his slave. Every family, including children, slaves, goods and persons who had come into it by marriage or adoption had its *paterfamilias*, who was its executive head or chief, enti-

tled to its service and invested with power to enforce obedience. It was a sort of corporation to which the *paterfamilias* was both president and board of directors.

In an age like this when money is the basis of almost the entire work of creating and distributing wealth, when every smallest service is paid for in cash, and when even families are often dissolved if the supply of money fails, and its members will attach themselves to some new protector who has more money, it is difficult to conceive of the part played by the family, as well as by the tribe or *gens*, under the Roman state, as the substitute for money and the organizer of industry. The *gens* differed only from the family in being a collection of families supposed to be descended from common ancestors, and to have the same household goods or ancestral worship. Often the *gens* partook of the industrial unity and despotism which belonged to the family. The principle of subordination to authority, and affection for the family name and headship, produced an effective organization, both for war or for politics, and for industry.

Among the Greeks, on the other hand, there was but little coherency to the family. Among the Spartans woman's rights and the ownership of property by women prevailed so extensively that Aristotle declared that women owned a third of the land in Lacedemon. Throughout Homer great individuality, independence and wisdom is shown by the women. The Jewish women occupied a medium position, less free than among the Greeks, less enslaved than among the Romans. Among the Teutonic races women were more laborious than among the Greeks, but hardly less free.

Subjection of the women to the men is not an invariable though a usual characteristic of savage life. Among the North American Indians it is severe, but among many of the Africans of the Soudan and the Congo the women are the merchants and traders and necessarily more free. The degree in which the family is conspicuous in the ownership of wealth, as distinguished from the individual, varies widely according to a race principle the causes of which are lost in the mazes of race development. Some birds return and rebuild every year in the same spot after migrating to a home several thousand miles distant, thus manifesting a sentiment of property in the family. Seals also have a strong sense of property in particular localities.

The influence of the Roman idea of the family, contending against the Greek and Saxon idea, has been felt throughout

Europe and America. At times the tendency to give stability to the family as the unit of society has caused the laws to lean toward entail, primogeniture and inheritance, securing the estate in the wife and children beyond the power of the temporary head of the family to convey, squander or dissipate. This is seen in the homestead laws, particularly in the Western States, in which the homestead, however valuable in some states, is exempt from execution and must be conveyed with peculiar care relative to the rights of wife and child.

It is sometimes asserted that the family and not the individual is the unit on which the state rests. It is on this principle alone that political rights and duties, such as military service, police service, fire service, service on the posse comitatus, on juries and in office, together with voting are cast upon adult males as distinguished from both women and infants.

The family relation is the most powerful of all incentives to industry, and closely connected with it is the desire to transmit property to, and provide for one's children. An intimate relation exists in history between the degree in which the integrity of the family is preserved and the durability of the state. Where the family tie is feeble, as among the Greeks and Jews and all nomadic tribes, and family authority is not made continuous through several generations, by transmitted wealth and inherited station, the people do not differentiate into cultured classes on the one hand and laborious classes on the other, nor do they greatly differentiate in their occupations. In such a condition, the state is transitory and revolutions frequent. Rome, which endured as a government for 1000 years, and Great Britain, which is in many things the successor of the Roman Empire in the modern world, find in the continuity they give the family, through the hereditary transmission of wealth, one of the chief causes of their greater stability and permanency as states.

In the vegetable world the grass which dies down to its roots with each succeeding year does not give rise to timber for great structures. So in the social world the family system which permits each generation to inherit nothing of the success, means, culture and gentility of its predecessor, will render the state perishable as the grass. It is moreover worse than in vain to bring into the world a generation of young men and young women tenderly reared and accustomed to the security and refinement, leisure for mental improvement and the cultivation of forecast and the habit of command, order and methodical management which

come with the early possession of ample means, if at the death of every parent these means are to be confiscated and the child is to be thrown upon a condition of physical toil for which he is less fit than he would be to direct the industry of others.

Experience proves that families have a continuous identity through generations. Many families manifest as closely the same inherited characteristics through centuries of varied experiences, as a person would at different periods in the same life. This family life shows itself in some instances in successive generations of honorable preferment ; in others in a long succession of legal or forensic skill ; another will be full of inventors. One will follow the sea, one will consist of great farmers, and another will turn out generation after generation devoted to art, theology or learning. In America, where the republican spirit is strong, great pains are taken by law to equalize men, as to their start in life, and their legal rights to the end of the race. Hereditary merit and social skill, however, not only assert themselves in individual cases but are transmitted along with their result in families. No ranks and titles exist, but the achievements and successes of each are none the less recognized by its members and by society, and constitute an element of transmitted power, continuous from one generation to another.

29. Social and Spiritual Wealth.—The evolution of society from barbarism toward civilization, like that of the individual from poverty toward wealth, if well rounded and harmonious, will be marked by a decline of the primary motives in human conduct, or the vital passions, and a rise of the secondary motives or those which are only indirectly and remotely connected with existence. It is usual to style the latter the higher, and the former the lower, parts of our emotional nature. The appetite for food, the desire for shelter of some sort, the passion for sexual association, and the determination to defend the spot of ground one has selected for his den or lair, are qualities which man shares with all the higher brutes. But the love of effecting useful results through industry, the passion to be deemed truthful, prompt, kind, observing, faithful, systematic, sagacious, courageous, enterprising, learned or thorough, are all passions which are only indirectly connected with the struggle for existence. In the degree that they develop, life is ennobled and dignified, made charming and attractive to others, and living becomes a fine art to him who lives.

Labor and production also become a source of enjoyment when

the processes connected with them are elevated into an art which gratifies the taste apart from the service it renders to others or the gain it brings to ourselves. In the degree that society advances toward civilization and occupations multiply and each is pursued with the skill of an artist and a specialist, the proportion of those who labor passionately and for love of their occupations increases relatively to the number of those whose struggle is simply an animal one for subsistence.

Thus a wide range of occupations opens up in which reputation, fame, social distinction, are pursued as ends. Others in which altruism or the common good is the motive. In others the good of a special class is looked after. The public teacher and critic of life and of morals, whether he be in the pulpit, the editor's chair, or in the presidency of a college, draws around himself a new form of social wealth in the circle of pupils to whom he imparts instruction, a form of wealth, which he could not afford to exchange for blocks or stocks.* Each is the Plato of his own academy—the autocrat of his own breakfast table. The artist has his circle of patrons, whose interest in his works, though merely an intellectual and æsthetic attraction, is more valuable and congenial to him than a baronial castle surrounded by acres of land tenanted by a dull peasantry, and furnishes the artist with a support as generous, a circle of friends as wide, and associations as agreeable, as those enjoyed by the baron. Thus social wealth embraces all those sources of attraction among men arising out of politics, war, scholarship, enterprise in industry, art, authorship, science, religion, philosophy, and all those sources of attraction among women arising in personal charms, conversational accomplishment, wit, social prestige and rivalry, grace, taste, tact, and the entire repertoire of means whereby happiness is maximized through social contact. Material wealth reaches its ultimate function and utility when it aids in furnishing the accessories and aids whereby social wealth can thus manifest itself. Material wealth may build its dining-hall, purchase the viands, and spread the feast; but unless the guests bring with them the elements of social wealth, intellect, wit, wisdom, the fame of public utility, virtue and beneficence, tact, courtesy, kindness, and culture, the

* *Roscher* ("Political Economy," book i, chap. 1, p. 138,) enumerates six varieties of economic labor, the last of which is: *f*. Services, in the more limited sense of the term, which embrace personal as well as incorporeal goods; as, for instance, the labors of the doctor, teacher, virtuoso, of the statesman, judge, and of preachers, whose office it is by way of eminence to produce and preserve the immaterial wealth known as the State and the Church.

outlay of material wealth fails. It is in exchanges of social wealth that man attains his highest happiness. Social wealth includes, therefore, all the means, spiritual, intellectual, moral, and physical, whereby man is brought into pleasurable association with his fellow-men.

30. The Wealth of Nations.—Certain nations are rich relatively to others, as individuals are. Certain nations pass through successive periods of poverty and riches. Some are rich in one or two aspects, as in area, mines, fertility, government revenues, manufactures or the like, and lacking in others. Early writers on political economy, especially of the mercantile or international school, taught that the foremost object of the science was to teach the means by which one nation might enrich itself relatively to others. Stress was laid upon colonial possessions, mines, shipping, large importations of coin, or exports of manufactures, or growth of foreign commerce. Of late political economy has tended more to become social economy than international economy. It has been occupied more in studying the relation of classes to each other, such as in England, the landlords, the farmers and the laborers, or the manufacturers and the employés. It can not be said that the relations of nations to each other, or the means by which they may impoverish others or enrich themselves, or *vice versa*, has ceased to be a topic among economists, whether practical or theoretical. Mr. Bourne's recent essays on the "Dependence of England upon Foreign Countries for Food," are as anxious a discussion of international gain and loss by a foreign trade in food, as Mr. Mun's "England's Treasure in Foreign Trade" of two centuries ago, only Mr. Bourne is not so certain as Mr. Mun was that the foreign trade is so great a treasure, relatively to the domestic.

Difference in relative national wealth may appear in difference in the capacity to put a fighting force in the field for defense, in difference in annual production and consumption, difference in the standard of living, as to the average quality of the habitations, clothing and food in use among the people, difference in accumulations of fixed capital, machinery, implements, and buildings, difference in the relative abundance of gold and silver in circulation as money, and in the abundance, stability and security of the paper money in circulation, and the degree in which it is safely substituted for coin ; the difference in the relative development of science, literature, art, luxury and leisure—but all these differences are likely to be measured with tolerable

fairness by a difference of income *per capita* as measured in money and in necessaries of life. The two hundred millions who inhabit British India are computed by the late minister, Sir Evelyn Baring, to have an average annual income of twenty-seven rupees (£2 14s.) per head. The thirty-six millions of people inhabiting the United Kingdom of Great Britain and Ireland have an average income of £35 per head. The former earn five hundred and forty millions of pounds sterling per year ; the latter, though only one-sixth as many in number, earn twelve hundred and fifty millions sterling per year. Assuming that the British Kingdom is two and a half times stronger than the country it has conquered, it will be seen that its national power is proportionate to the aggregate annual incomes of its people, and is out of all proportion to their relative numbers.

The doctrine which has caused many economic writers to regard the relative rights of nations, and the means of their relative growth in wealth, as having been eliminated from the science of political economy is, that since, in all exchanges between merchants in different countries, the exporter in each country gets an equivalent value for that which he exports, and a profit, therefore the country importing must always grow richer by the trade. This is the famous shibboleth of "equivalence of values in trade" by which the Manchester school of economists claim to have established as a fundamental truth in political science, that the only function a government can wisely exercise in the matter of trade is to "let it alone." To this the answer comes, "Let it alone—*when?*" Let it alone after, by centuries of armed conquest, corrupt treaty and profligate legislation, it has been throttled, felled to the ground, bound and gagged ?

"Letting trade alone" would mean as between Great Britain and India, that the former should withdraw her armies and leave the Hindoos to run their country.* It should have let Indian

* A writer in the *Contemporary Review* for June, 1886, Mr. Samuel Smith, says :—"I said that another reason why the natives looked with jealousy on the growth of the foreign trade of India was, that it was largely at the expense of their home industries. It is hardly realized in England that our cheap machine-made goods have destroyed the bulk of the old hand-made manufactures of India. At one time a considerable part of the population was employed in these industries. India now imports about thirty-five millions worth of manufactured goods, chiefly cotton cloth, hardware, and pottery, which were once made at home. If we allow £2 per head as the annual income of each person in India, the making of their goods must once have sustained about seventeen millions of people. Now they are imported, no doubt at a cheaper cost, and according to the formulæ of political economy, the labor and capital so employed can be turned to more profitable directions, and India be a great gainer ; but

trade alone from the first in order to claim its action to be in accordance with any wise or just theory of *laissez faire.*

Many things are wealth and profit to individuals which are not wealth or profit to the nation of which they are citizens, and *vice versa.* Many things are part of the wealth of a nation which are no part of the private wealth of the people. Public and private debts generally are individual wealth, but they are in the first count or point of view only deductions from the wealth on which they are liens, and therefore leave the aggregate of national wealth unchanged.* On the contrary, mountain peaks, inaccessible to the foot of man, lakes, rivers, and untouched mines and forests, roads and highways, laws and the general standard of civilization, the army and navy, may be wholly inappropriable by individuals, and yet may form chief elements and causes of the nation's wealth. The mountain peaks attract and control the air currents and the rainfall, without which fertility could not exist, and a continent could be only a Sahara. The army and navy, as in the case of England and India, may be the cause of a diversion of the trade of one country to the producers of another and so may be of great industrial importance to the country maintaining it, and a leading source of its wealth. So, while Roman laws and roads, or Greek art and culture, were not citizen's wealth and did not make one Greek or Roman richer than

---

it so happens that the hand-loom weavers and the small artificers who made these goods in this simple native fashion, and as a hereditary calling, had no other trade to turn to. The capital which was their trained handicraft was destroyed, and they had either to starve, or take up vacant land for farming, or become coolies. Most of them took to agriculture ; but it was a hard struggle to live, for all the good soil was already taken up, and they had to reclaim from the jungle barren land, on which they could barely subsist. The general result has been to make India more than ever a country of poor peasants, with little variety of pursuits. Of course this process greatly increases the foreign trade. The people of India require to export a large portion of the produce of the soil in order to buy their clothing and utensils, and another large portion to liquidate the "Home charges" and private remittances made to England, When thus analyzed, it will be seen that it is futile to reckon increase of foreign trade as equivalent to increase of wealth ; it is rather a substitution of foreign for domestic exchange. The food and raw produce are exchanged against the cloth and hardware of England, instead of against the products of innumerable small makers at home."

* Professor Sidgwick ("Politica. Economy," p. 40), holds that "credit is a source of wealth of which the value is measurable by the additional profit that it enables him to obtain." In other words the value of credit is the capitalized sum or principal on which the additional profit it brings us would be the interest. In this sense the volume of credit ordinarily outstanding in a country is an addition to the country's wealth not to the extent of the credit, but to the extent of the capitalized sum by which the credits stimulate production and increase earnings so as to pay the current rates of interest on such sum.

another, they had great potency in making Rome and Greece as republics and the empire of Macedon, as well as that of Rome, wealthy relatively to other nations. The growth of private wealth depends on the stability with which free exchange of commodities, lands, and services, is made to take the place of individual mob force and of foreign conquest as a means of obtaining the satisfaction of human desires. This stability of exchange depends on the certainty with which succession to office in established order is preserved, whether it be by elections, by rank, or by birth, as well as on the fidelity with which official decisions are obeyed or their obedience compelled by sheriffs, police, armies, and navies. In this manner, of two countries having equal advantages, at the same time, one may be growing in wealth because it has a good government or an efficient army and navy, or vigorous laws, or a good police, while another may be declining in wealth or may be suddenly subjected to vast cost for want of them.

The United States profess to be one of the few nations which may safely exist without other army or navy than that which it can recruit or build after the emergency which calls it into use shall have arisen. If this claim be sound it still would not follow that either of the great European powers could with safety imitate such an example. Nor was the United States, on the occasion of its recent war, able to enlist an army so much more rapidly than its Confederate foe as to commend the example peremptorily to governments encompassed by greater dangers and inheriting a habit of greater caution.

In these armies and navies, revenues and national credit, administration of justice, ways of transit and means of exchange and payment, are found forms of national wealth which would not be included in any aggregations of private wealth.

As national wealth rests on bases not entirely identical with private wealth, so also does national profit rest on other bases than private profit. It is because many occupations present a very poor field for private profit, but are of great national advantage, while others afford an easy and large private profit, but are a great public injury, that the state seeks to wield the taxing or punishing power to suppress the latter and develop the former. It taxes the liquor-sellers and pays over the fund to the school-teachers and the courts, because liquor-selling, though easily profitable to the merchant, is injurious to the people. In vain might any pretended economist argue that because a farmer buys all

the whisky necessary to inebriate him at less than the market price, there is a perfect equivalence of exchange between the value of the farm he is drinking up and the value of the whisky he is getting in exchange for it. The answer would be that there can be no cheapness in the purchase of things that it is a loss to accept as a gift. The Trojan horse was not cheap because the Greeks supplied it for nothing. Neither is any importation cheap which contains within its belly the means of permanently destroying an important industry.

31. The Evanescence of Wealth.—Wealth disappears by consumption, which may be either productive or unproductive, by depreciation and by decay. Of these modes of disappearance depreciation is the mere decline of demand, or abandonment of the use by society of that which once was wealth, whereby it ceases to be wealth though it still exists. Supposing a population to have once existed in Babylon or Nineveh comparable in numbers and wealth to that which now exists in France or the United States, there must have been a gradual extinguishment of land values in those countries about equal to the entire present land values in these two modern nations. The extinction of values in India by the extinguishment of manufactures has been very great. Before its partial conquest by the Portuguese and English, it was the synonym for great national wealth, insomuch that Milton could build no higher metaphor by which to define infinite riches than

> — all the wealth of Ormuzd and of Ind.

To-day India is the pauper nation, a burden to those who have fed on her riches. In Persia, Arabia, Turkey, Egypt, Morocco, Algiers, Spain, Italy, and Greece, there has been a disappearance of wealth which goes far toward balancing the modern increase of wealth in France, Germany, the Netherlands, Great Britain, and the two American continents.

All forms of wealth have their term of life or duration, from that of the flower which fades in an evening to that of a civilization which lasts for centuries. From all society may withdraw its demand, and with that, however durable the structure, the value ceases. In parts of Asia the people are proud to wear the clothing worn by their ancestors, but decline to dwell in their habitations, even though they be princely castles. Hence in Persia every city is made up one-half of ruins, and in time successive cities rise near the same spot, as Seleucia, Ctesiphon,

Almadin, Kufa, and Bagdad were built successively from the ruins of Babylon.

In modern times, and in the most prosperous countries, deserted villages and abandoned farms mark spots where wealth has been sunk by mere depreciation, the current being led elsewhere by the opening of canals or railways which tapped instead of feeding the old localities. Even in the heart of New York city, when the wholesale dry-goods merchants removed from Pearl and Water Streets in 1847 to 1857, over to Chambers and Warren Streets, property on the former streets fell to one-tenth its former value, from which it recovered by becoming a center of the oil traffic. Ireland, since 1846, and Portugal, have receded largely from former conditions of prosperity; though in the last quarter of the last century Ireland gained several millions in population, notwithstanding her absentee landlords and her Celtic effervescence.

The destruction of wealth, essential to the creation of government or maintenance of nationality, is by some classed as unproductive, and by others as productive consumption. It cost France one million lives and seventeen hundred millions of dollars to maintain under Napoleon twelve years of war with the allied powers.* It probably cost the United States in loss of wealth in all forms about nine thousand millions of dollars to suppress the war for secession by the slave-holding states, including the losses in both sections of the Union. But this was offset as to the Northern States by so extraordinary a quickening of internal

---

* "From 1803 to 1815, twelve campaigns cost us *nearly a million of men, who died in the field of battle, or in the prisons, or on the roads, or in the hospitals, and six thousand millions of francs.* . . .

"*Two invasions destroyed or consumed, on the soil of old France, fifteen hundred millions of raw products, or of manufactures, of houses, of workshops, of machines, and of animals, indispensable to agriculture, to manufactures, or to commerce.* As the price of peace in the name of the alliance, our country has seen herself compelled to pay *fifteen hundred additional millions*, that she might not too soon regain her well-being, her splendor, and her power. Behold, *in twelve years, nine thousand millions of francs*," (seventeen hundred millions of dollars), "*taken from the productive industry of France and lost forever.* We found ourselves thus dispossessed of all our conquests, and with two hundred thousand strangers encamped on our territory, where they lived, at the expense of our glory and of our fortune, until the end of the year 1818."—*Dupin.*

The effect for a time is thus described by an eminent French engineer:—"I have frequently traversed in different departments, twenty square leagues, without meeting with a canal, a road, a factory, or even an inhabited estate. The country seemed a place of exile abandoned to the miserable, whose interests and whose wants are equally misunderstood, and whose distress is constantly increasing, because of the low prices of their products, and the cost of transportation."—*M. Cordier.*

and external commerce, and of both agriculture and manufactures, as to make the net increase in wealth during this decade rather greater than the usual increase.

The disappearance of wealth by decline of values in advancing states like Great Britain and America, is a fact to which the census gives no adequate recognition for three reasons, viz.:

1. Because in modern times by various means the volume of money is constantly on the increase, and hence all values are being measured by a medium whose measuring value is constantly lessening, and which tends therefore to swell the money terms in which all aggregate valuations are expressed, whether of lands, labor or commodities. This is one of the deceptive features about all tables of increase in national wealth.*

2. Interest prompts a loud mention of new enterprises and silence regarding those that disappear.

3. The machinery of statistical inquiry has never been devised with the view of collecting depreciations and losses of wealth.

Dr. Carey estimated † that the whole value of the land of Great Britain, with all the improvements expended upon it from the beginning, would not equal one years' wages of those who are in some way concerned in the work of production upon its surface ; also that the cost of making the improvements on the surface of the land in New York and Pennsylvania, has been at least five times greater than the existing value of the improvements. The course of production is first of labor into consumable commodities, food, clothing, etc., as when the farmer raises corn. Then a conversion of these into reproductive wealth or implements of production which are not in themselves consumable except by wear and tear. Then a loss of value on the part of these which sooner or later extinguishes it altogether. The last process of extinguishment may require years or centuries, but so far as the possibility of deriving enjoyment directly from its consumption is concerned, such possibility is extinguished forever the instant it is converted into reproductive wealth. The ready perishability of all enjoyable wealth renders necessary to each person who obtains or produces more of any one form than he can consume that he shall exchange it for reproductive wealth as the only means of avoiding its total loss.

---

* The term money as used in this sentence, must be understood as comprehending all transferable credit as defined in chapter on money.

† "Social Science," by McKean, p. 92.

The facility with which reproductive wealth, *i.e.*, lands, mines, factories, railways, etc., can be exchanged for enjoyable or consumable wealth should not conceal from us the fact that, as enjoyable wealth, it is lost to society forever for all enjoyable purposes. Mankind can never eat, drink or wear their farms, factories, banks, railways, money or ships. The storage of values into these forms precludes the enjoyment of them finally and irrevocably, though they are still exchangeable for those we can enjoy. If it can be said to be abstinence for one who has provided for himself all the corn, meat, apples and fish he desires, to exchange what he can not consume for some form of non-consumable wealth such as money, land or ships, then it may be said that capital dates from abstinence. It rather dates from an excess of sustenance. This excess is exchanged for money, stocks, cars and ships, concerning which abstinence is impossible because enjoyment is impossible. The first law of wealth is therefore that the surplus of sustenance over one's own capacity to consume can only be made to profit its possessor by exchanging it for means of production. Of these, the rate of consumption is slower and the sole enjoyment obtainable from them is that which flows from custody, control or power.

The operation of the law of evanescence is slowest on those forms of property of which the uses are almost social. A book, considered as a literary work, is an extremely social form of property, because the greater the number of others who read it the greater is our enjoyment in reading it. The best readers can only afford to read a book when it is certified to them that the number of others who read it is very great. Its value to each is proportionate to its diffusion among many. But great books are more nearly imperishable than any other form of wealth. A Chicago publishing house adopts as its motto the legend, "Words are the only things that never die." It is very doubtful whether some of the narratives in Genesis are not older as writings than the pyramids. But as sayings or legends not reduced to writing there is reason to believe they are the older of the two.

So the use of all inventions and discoveries is necessarily social, and the wealth they give rise to is imperishable—albeit it is often too social in its use to be the subject of any private appropriation whatever.

Works of art and architecture are tolerably permanent in duration, compared with food and clothing, but far less permanent than are the books which pass into universal use. They are

therefore social in their uses, compared with food and clothing, since they must be seen by many at once to give the highest pleasure either to their creator, possessor, or viewer. They are less social than the great books of the world, however, such as the Bible, Homer's Iliad, the Zend Avesta, Justinian's Institutes, and Shakspeare, since but a few scores of people may behold them at once, and then only by much cost and pains of travel, while these great books can be read by millions at once at the cost of less than a common meal.

Thus wealth is evanescent in the degree that it is vitally necessary to an individual and capable only of a selfish use except as it may be exchanged. It is enduring only as it is incapable of either a vital or selfish or merely personal use, but must be put to social use. A large farm is in social use because its crops must feed society. They can not be eaten wholly by those who cultivate them. A small farm is in a more personal use because it may feed only those who till it. A lane is a more social use of land than an enclosure. A highway is more social than a lane. A railway is more social than a highway. Hence it is easy to close up a lane, difficult to close up a highway, and since railways were built, hardly, except in China, has one ever been closed.

The species of wealth, whose use is of all others perhaps the most social, is money, since the very function of money is to bring men who do not know each other, and have no interest of an emotional kind in each other, into relations of reciprocal utility and mutual help, either as employers and workmen, sellers and buyers of goods or lands, lenders and borrowers of money itself or the like. The use of money being thus social, its value is the most enduring perhaps of any merely material commodity—meaning by material commodity one that may perhaps serve ideas but contains none, in the sense that great books, discourses or works of art embody ideas. Twenty kinds of money, however, have prevailed and disappeared in England since Ossian wrote his address to the sun, but that brief poem shows no symptom of decay. The pound changes to the broad, the broad to the guinea, the guinea to the sovereign, but no subserviency of fashion overtakes the lines :

> Oh, thou that rollest above
> Round as the shield of my fathers,
> Whence are thy beams, O sun,
> Thine everlasting light !

Yet, compared with something less social in its uses than money,

as, for instance, with a reigning house, a titled family, or a single possessor of wealth, money itself, the pound sterling, for instance, seems imperishable. A lineal descendant of the Plantagenets, it is said, sells meat at a butcher's stall in London. The titles of prominent English nobles are of very recent date, and the average life of a great fortune seldom equals that of a crow.

Doubtless, many possessors of wealth have practised abstinence at that critical period in early life, when, their earnings being small and their savings meagre, and such as might easily have been spent in a night of debauchery, they have denied every temptation in the determination to use their savings as capital. All capitals must begin in a pin's value, as all life begins in a germ cell.

In the sense in which life is the fruit of the germ cell, wealth is the fruit of abstinence. But as no multitude of germ cells are the equivalents of one life, so no multitude of abstinences are a fortune. Life, besides the germ cell, implies a period of growth by a continually increasing organism. So relative wealth, besides abstinence, implies a long period of growth in the active assimilation of profit, *i.e.*, in the active conversion of an excess of income over expenditure into the means of creating wealth.

Mr. Grunlund believes that he has disproved the proposition that wealth is the fruit of abstinence, when he shows that a laborer earning two dollars a day and saving one dollar would need to live three thousand years to accumulate one million. The answer is, that this singular hypothesis assumes that the laborer keeps right on working for wages without using his past acquisition as a capital, but simply keeping it as a hoard. Such a man being, according to the assumption, a curse to society in the economic sense, since he is daily withdrawing a given stock of wealth from the world's use instead of employing it in the world's service, ought not to be permitted to accumulate a million in any length of time whatever. He would be a nuisance after he had reached from one thousand dollars to five thousand dollars if he did not give it a social use of some kind. But should he give it a social use of any kind, whether in employing labor, building houses, or selling goods, he will pass out of the germ stage of accumulation. As we shall show in our chapter on profit, if he employs one thousand men at two dollars a day each, judiciously, his own gross returns may, and would be likely to rise to one thousand dollars a day, and in that case he would obtain the million of dollars in a few years.

The various forms of storing wealth permanently are usually cemeteries of human labor and the means of ostentation and display. Gold and silver, and perhaps diamonds, are means of storing wealth, the former of which, through their use as money, have also been of inestimable service. But when, as in the building of the great pyramid of Cheops or Gizeh, the toil of three hundred and sixty thousand men is employed for twenty years on a mountain of stone, the economist is puzzled to know whether this, however permanent the structure, is a storage of value or an unrelieved waste of toil.

32. Can Poverty Be Abolished?—All exchanges are made out of fullness, *i.e.*, by those who have something to give for what they get. But it can hardly be claimed that the exchange of subserviency on the part of the slave for despotic protection on the part of his master is made out of the slave's fullness of courage, strength and force. It is rather out of his emptiness or lack of these qualities, and his fullness of meekness, timidity and other negative qualities that he is enslaved.

So the exchange of the laborer's time, strength and will for the wage which he gets for his labor may imply fullness of health, strength and muscle on the part of the laborer, but it in nearly all cases implies relative emptiness of purse. From three-fourths to nine-tenths of mankind labor for the wage, salary or fee which they get for the labor, and because but for the means of obtaining the food, shelter and clothing which they buy with their wages from week to week, they would perish within a very few weeks. The vital question to the humanitarian is whether this system of living "from hand to mouth" on the part of so large a portion of mankind is an economic necessity, in the same sense that the regular return of winter's cold and summer's heat is a physical necessity.

The opinion is rapidly becoming popular that we are approaching a period when poverty, in the sense of an immediate and pressing necessity that one shall work in order to escape physical suffering from hunger and nakedness, will be abolished absolutely as to everybody. When the advocates of this opinion are asked if, as men are now constituted, they will not cease working the instant they are relieved from the fear of hunger, cold and homelessness they reply, "No! men and women will so far have risen out of their present enthralled condition as to be disposed to work, as Fourier defines it, passionately and because they enjoy the work, and will select each the work he most enjoys, and which

will at the same time profit all the most." This is not only the root idea of Fourierism and of all socialism, but finds a large encouragement also in many of the altruistic teachings and tendencies of the Christian and Buddhist religions.

One can hardly believe that the industrious labors of the bee, the ant and the beaver are prompted by either the love of gain or acquisition on the one hand or by fear of suffering on the other, Yet if the bee be taken to a country in which the flowers bloom all the year round, it (or rather its immediate kinsman, for the average life of the neutral worker is only one working season) will cease after one season to lay up honey in a country in which the store can never be wanted ; conceding that there is an irresistible instinct of labor in certain insects and animals, there certainly is not in man. He can not be depended on to render many of the services now essential to the maintenance of society after he is beyond the need of the wages he will earn. In casual instances he will do so. But one has only to reflect how long he would have to wait before a two cent morning paper or a cup of coffee would be brought to him, if every person in the world were a millionaire, to see that for all the smaller and cheaper subdivisions of human service, on which the comfort of our daily life depends, he is indebted to the fact that the person who renders it is poor.

The industries of society may be compared to a low pressure engine in which the piston works with wealth pushing on one side and poverty, or an exhausted receiver, pulling on the other.

When the economist urges that if all the wealth on the surface of the earth were converted into food and clothing it would not support the world's population three years ; that in fact the actual food and clothing now produced, under the stimulus and pressure to which mankind are subjected, would last but little more than one year, and hence that the continued pressure of impending pain is necessary to induce a degree of industry adequate to sustain the population of the world in its present degree of comfort, the socialist replies : "I concede that that is now true, but it does not follow that it will always be true."

So far as the socialist bases his complaint on the assertion that the wealth accumulated in the hands of the few wealthy is so much abstracted or withdrawn from the stock of goods that would be consumable by the poor, he is evidently in error : for, as will appear more fully in chapters IV. and V., the surplus wealth of the

rich must be invested in such modes as to give society the use of it, or it can earn no income.

So far as we can see, the fear of impending suffering, as well as the prospect of enjoyment or rest from the possession of wealth, is necessary to insure a degree of wealth-production sufficient to keep mankind alive. Whoever could awake to-morrow morning on a world in which every human being should be, by whatever means, relieved from the possibility of suffering in case he should render no service to others, would awake on a world in which wealth, or the ability to command the services of others, would no longer exist. One might as well imagine a world in which the food would consist of strains of music. If mankind were fed at all it could only be as the prophet was fed by the ravens. It would not be an economic world, and its conditions are so impossible that it is idle to speculate on what it would be.

In the existing world the pressure of economic want, present or prospective—in short, poverty—is as potent a force in wealth-production as hunger is in causing the body to be fed or cold in causing it to be clothed. Publicists agree that the isothermal limits within which the highest intellectual culture is possible are those in which the body can not be sustained, without almost continuous labor, but within which by continuous labor comfort is possible. The want-pressure essential to provoke the maximum of effort does not seem heretofore to have resulted in the production of more of the necessaries, luxuries, and conveniences of life than were at all times necessary to a fair average degree of comfort. Presumptively, therefore, the want-pressure has not been in excess of what was needed. In so far, however, as instances can be adduced in which men work on just as usefully as ever after this want-pressure is removed, the economist will be prepared to admit that its prospective complete removal presents an improved appearance of being consistent with the complete performance of the labors essential to the maintainance of mankind.

Meanwhile, is it either cruel or fallacious to assume that there are forms of wealth or power fully equal, in value to their possessor, to pecuniary power? Health and muscular power are usually sacrificed in the successful pursuit of wealth, but are usually retained and enjoyed in a life of moderately hard and steady labor. "In the sweat of thy brow thou shalt earn thy bread," is found to be a curse pregnant with a blessing, when it happens that those who pride themselves on having escaped the

curse of toil betake themselves to the physician for medicines which will restore the perspiration.

The wealth-pursuit, when most successful, often hardens the heart and steels the disposition of the pursuer into a degree of callousness to all the more generous impulses which becomes fatal to the enjoyment of wealth when obtained.

In such cases the highly successful man financially becomes a failure in life socially. There is a certain respect and faith on the part of his fellows which many poor men have never lost but which he is powerless to gain.

It is also true that the "hand-to-mouth" or "happy-go-lucky" life of those who do not strain after more than the privilege of living in a humble way escapes much of the torture and care incident to a life of winning and losing on a large scale.

If by the "abolition of poverty" is meant the ensuring a reasonable certainty of comfortable support to all who are ready to do what they can to be useful to their fellow-men, it may be doubted whether any humanly invented system can effect much improvement on the one now in force. The notion that poverty can be abolished is a flattering gospel, far more attractive to our human impulses than to have the poor always with us, and especially than to be ourselves the poor. Without professing the least faith in the efficacy or convincingness of epithets, we are compelled to feel, though we may not say,* with Franklin, "He that tells you you can succeed in any way but by labor and economy is a quack."

---

* Quoted thus by Wolowski in Roscher Pol. Econ., Am. Edin., p. 21.

CHAPTER III.

VALUE AND PRICES.

33. What Is Value?—Value is the degree of esteem, affection, appreciation or desire felt for an object, by those wishing to possess it, and expressed in terms of the other objects of esteem, affection, and desire with which they bring it into comparison. It is the sense persons have of the worth of things. If they already have the things, their value is what they will forego having rather than part with them. If they have them not the value of them is what they will give for them. Hence value is a sense of relation or equation between two things, and both have to be estimated. In this sense it is like weight, measurement, size, etc., in all which conceptions two things are held in mind for comparison, viz., the object and the pound, foot-rule, cubic yard, ton, or other standard with which it is compared and without naming which no idea of weight or measurement or size can be conveyed. As the idea that a stick is two feet long cannot be thought of, except by comparing the stick with a standard called a foot which was originally a man's foot, so the idea of value cannot be thought of except by comparing the thing valued with some standard, as a penny, a sheep, or an ox. To say one cow is worth four sheep is a statement of value as truly as to say it is worth forty dollars.*

---

* *Adam Smith* ("Wealth," etc., p. 15) says: "At all times and places that is dear which it is difficult to come at, or which it costs much labor to acquire, and that cheap which is to be had easily or with very little labor. Labor alone, therefore, never varying in its own value, is alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared. It is their real price; money is their nominal price only. . . As a measure of quality, such as the natural foot, fathom, or handfull, which is continually varying in its own quantity, can never be an accurate measure of the quantity of other things, so a commodity which is itself continualy varying in its own value can never be an accurate measure of the value of other commodities. Equal quantities of labor at all times and places may be said to be of equal value to the laborer. In his ordinary state of health, strength, and spirits, in the ordinary degree of his skill and dexterity, he must always lay down the same portion of his ease, his liberty, and his happiness. The price which he pays must always be the same whatever the quantity of goods which he receives in return for it. Of these, indeed, it may sometimes purchase a greater and sometimes a smaller quantity, but it is their value which varies, not that of the labor which purchases them."

H. C. Carey says "value is the measure of the resistance to be overcome in obtaining those commodities required for our purposes—of the power of nature over man—the

Adam Smith supposed that labor is the standard of value of all commodities, and that it had a fixed value in itself. He did not seem to conclude that value, like weight or length, is not a quality of one thing, but a ratio between two. He does not tell us what

---

cost of reproduction (making or getting another of the same kind) being the limit which value cannot exceed."

Roscher says ("Political Economy," vol. 1, ch. 1, sec. iv): "The economic value of goods is the importance they possess for the purposes of man, considered as engaged in economy (housekeeping, husbandry), the quality which makes them exchangeable against other goods. A clear distinction, however, should be made between utility and value in use. Utility is a quality of things themselves, in relation, it is true, to human wants. Value in use is a quality imputed to them, the result of man's thought or of his view of them. Thus in a beleagured city stores of food do not increase in utility but their value in use does."

Karl Marx ("Kapital," vol. 1, p. 6) says, "that which determines the magnitude of the value of any article is the amount of labor socially necessary, or the labor time socially necessary, for its production . . . the magnitude of this value is measured by the quantity of the value-creating substance, the labor contained in the article. The quantity of labor is measured by its duration, and labor-time in its turn finds its standard in weeks, days, and hours." This he explains, however, to be "not idle and unskilful labor-time but average homogeneous labor power," *i. e.*, what the average laborer will do in the given time. By this he measures the time socially necessary. The introduction of machinery lessens the time socially necessary.

"The labor-time required changes with every variation in the productiveness of labor" (p. 7).

(P. 68.) "The value, or in other words, the quantity of human labor contained in a ton of iron is expressed in imagination by such a quantity of the money commodity as contains the same amount of labor as the iron."

Bastiat ("Harmonies of Political Economy, Sterling," 135): "Value is the relation of two services exchanged."

Cairnes ("Leading Principles," p. 11) defines value as "the ratio in which commodities in open market are exchanged against each other."

F. A. Walker ("Political Economy," p. 5) says "value is the power which an article confers upon its possessor, irrespective of legal authority or personal sentiments, of commanding in exchange for itself the labor or the product of the labor of others."

Cherbuliez ("Precis de la Science Economique," vol. I., p. 202) says "the value of a product or of a service can be expressed only as the products or services which it obtains in exchange . . . If I exchange the thing A. against B., A. is the value of B.; B. is the value of A."

Jevons (Primer, p. 98) defines value as proportion in exchange.

Perry (A. L.), following Bastiat, defines value as "the relation of mutual purchase established between two services by their exchange."—"Political Economy," p. 126.

La Vasseur says, ("Precis d' Economie Politique, p. 175) "the relation resulting from Exchange—*le rapport resultant de l'echange.*"

Locke, McCullough, Ricardo, and *Carey* agree in making labor the sole cause of value.

The most vigorous opponent of this theory of value is Henry Dunning MacLeod, of Cambridge, who argues as follows ("Principles of Econ. Philosophy," vol. I, p. 303):

I. "*If Labor be the sole cause of value, then whatever thing labor is bestowed upon must* (always thereafter continue to) have a value (proportionate to the labor bestowed upon it)." The parts in brackets are our own, but are essential to a complete statement, and are embodied in MacLeod's fourth point.

If this proposition were true, no person could ever make a loss by expending labor on

he means by labor, viz., whether it means working for a certain time a day for instance, without regard to results accomplished, or working with a certain intensity, *i. e.*, until fatigue sets in, without regard to either time or results, or working with a certain ef-

---

things not needed, whereas this is one of the most frequent sources of loss. The British Government expended in 1864-70 £20,000,000 on a class of armored gunboats which, before any use was made of them, were condemned as worthless, owing to improvements in the construction of guns. They expended large sums on iron guns which became useless by substitution of steel guns, etc.

A telegraph company expended large sums of money in constructing a line through Siberia and Alaska whereby to get telegraphic communication between New York and London via San Francisco and Behrings Straits, which was made totally worthless by the laying of the first Atlantic Cable. Indeed values are constantly passing out of all forms of wealth by supersedure through substitution of other forms and fashions as well as by use. MacLeod's other points were:

II. If labor is the cause of all value, then *all variations in value must be due to variations in labor*. To this he urges that certain land in London is worth £1,000,000 per acre irrespective of the value of any labor bestowed on it. Yet some day this entire value would have disappeared as it now has from Nineveh and Babylon.

When a fair is held in a town the booths at the fair acquire a value. At the end of the fair they lose it.

Timber trees have value when no labor has been bestowed on them. Cattle, herds, and flocks have value, though they pasture and multiply of themselves without the aid of human labor.

The owners of ore mines and quarries attach a value to them before any labor is bestowed on them.

A whale stranded on the beach in the Firth of Forth sold as it lay, the free gift of nature, for £70.

The cast-off skins of snakes at the zoological gardens in Paris sell to chemists for the uric acid in them for 9 shillings the pound—not a product of human labor.

MacLeod's third point is: "If labor be the sole cause of value, then all things produced by the same amount of labor must be of equal value."

If so, if a sportsman shoots a pheasant with one barrel and a crow with the other, they ought to have equal value. A pearl and its shell, a diamond and the rubbish it is, found in, a salmon caught on one hook and a dog fish on the other of the same line would have equal value.

IV. *If labor be the sole cause of value the value must be proportional to the labor* (included in our point I.)

V. If labor be the sole cause of value a thing once produced by labor must always have value and the same value.

On the contrary, a thing has value in one place and not in another and at one time and not at another. The Jesuits buying provisions of the savages of Polavri offered gold and were laughed at. The savages would take only iron. A professor's learning in Greek or mathematics has value in a university but none in the Hebrides. A lawyer's abilities have value in London but none in Timbuctoo.

Medical knowledge has no value where no one is ill.

VI. If labor is the sole cause of value what is the cause of the value of labor?

MacLeod sums up thus (p. 317): "Hence we see

"1. That there are vast quantities of property, both corporeal and incorporeal, which have value, upon which no labor was ever bestowed.

"2. That quantities, both corporeal and incorporeal, may be produced by labor which has no value.

ficiency, as for instance until a field is planted, without regard to either time, intensity, or results, or working until a certain result is obtained, as for instance a chair is made. To say that labor can be measured in quantity by mere time, without regard to re-

---

"3. That the same quantity of labor may produce products one of which has value and the other no value.

"4. That quantities produced by varying quantities of labor have the same value.

"5. That things produced by labor may have value in some places and not in other places; and at some times and not at other times.

"6. That things produced by less labor may have greater value than things produced by more labor."

From these indisputable propositions, the result of practical experience, the undeniable inference is that labor is not in any way whatever the form or the cause of value, or even necessary to value; and in fact in this commercial country the enormously greater proportion of valuable property is not the result of labor at all.

(—p. 323) Seeing that Labor and Utility altogether fail to stand the test of being the cause of value, what remains? The only thing which ancient writers, Aristotle, the author of the "Eryxias," and the Roman Lawyers, in modern times the Physiocrates, Smith, Condillac, Whately, Bastiat, J. B. Say, and many others have observed—Exchangeability. And what does Exchangeability depend upon? If I offer something for sale what is necessary in order that it may be sold? Simply that some one else should DEMAND it. Aristotle said long ago that it is *chreia* or demand that binds society together.

Here it is quite clear that we have now got the true source or origin or cause of value. It is *Demand*. Value is not a quality of an object, but an affection of the mind. The sole origin, source, or cause of value is Human Desire.

(—p. 326). It is value or demand which is the cause of or inducement to labor. Boisguillebert saw this most clearly; he says ("*Factum de la France*," ch. v.) consumption (consommation or demand) is the principle of all wealth. All the most exquisite fruits of the earth and the most precious products would be nothing but rubbish if they were not consumed. So Hume says ("Essay on Commerce"): "Our passions (desires or demand) are the only causes of labor." Genovesi ("*Lezioni de Economia Civile*," part ii, ch. i.) points out that though money is the apparent or proximate measure, the ultimate measure to which not only things but their price is referred is man himself. Nothing has value where there are no men, and the very few things which have a low price where men are few have a very high price where there are many people. And this is a reason why things and services have a much higher price in the capital than in the distant provinces.

So *Beccaria* says (*Del disordine e de rimedj delle monete nello stato di Milano*): "Value is the substance which measures the estimation in which men hold things."

Condillac says, (Le Commerce et le Gouvernment, ch 1,) "This esteem is what is called value. Since the value of things is founded on the want of them or the demand, it is natural that a want more strongly felt gives things a greater value, and a want less felt gives them a less value. . . A thing has not value because it has cost much, as is commonly said, but people bestow expense on it because it has value."

Even *Adam Smith* (Book 1, ch. ii) describing the vineyards from whose grapes the best wines are produced, says, "For though such vineyards are in general more carefully cultivated than most others, the high price of the wine seems to be not so much the effect as the cause of this careful cultivation." Smith here perceives that instead of labor being the cause of value it is the value that causes the labor to be performed.

Value then in its true sense signifies an affection of the mind and not a quality in an object or the result of labor. The usual phrase is, "I value so and so." It is the force of attraction between the mind and some external object.

sults, intensity, efficiency, etc., is absurd. Nor does Dr. Smith make it clear whether the labor, by which the value of a commodity is gauged, is the labor expended in bringing it into existence or in bringing into existence the commodity which is given in exchange for it. These two quantities of labor are quite distinct, both are involved in the equation, and they may be very unlike.

Dr. Carey describes value and utility by a generalization and not by a definition. He says:* "Utility is the measure of man's power over nature ; value, the measure of nature's power over man. The former grows, the latter declines, with the power of combination among men. Moving thus in opposite directions, they exist always in the inverse ratio of each other." Many instances might be cited in which this generalization holds true

---

Says *MacLeod* again (p. 332) : "All production is founded upon speculations. Producers find out or think of what other people want and then they produce, and if none want or will buy what is produced, such an article has no value. All production, then, is founded on speculation, varying through all degrees of prudence, certainty, and risk. All producers speculate that there will not only be buyers who will want their products, but will want them to such a degree of intensity as to be willing to pay a sum at least sufficient to pay the cost of production and a profit besides. Hence, as a fundamental truth, speculation is the mother of production and demand is the origin of value."

Jevons ("The Theory of Political Economy," p. 178) says : "If no use could be found for the Great Eastern steamship, its value would be nil except for the utility of some of its materials. On the other hand, a successful undertaking, which happens to possess great utility, may have a value for a time at least, far exceeding what has been spent upon it, as in the case of the Atlantic cable. The fact is that labor once spent has no influence on the future value of any article; it is gone and lost forever. In commerce bygones are forever bygones; and we are always starting clear at each moment, judging the values of things with a view to future utility. Industry is essentially prospective, not retrospective; and seldom does the result of any undertaking exactly coincide with the first intentions of its promoters. . . It is equally to be remembered that labor is itself of unequal value. I hold labor to be essentially variable, so that its value must be determined by the value of the produce not the value of the produce by that of the labor."

Ricardo (Pol. Econ., p. 11) says : "Adam Smith, after most ably showing the insufficiency of a variable medium such as gold and silver, for the purpose of determining the varying value of other things, has himself, by fixing on corn or labor, chosen a medium no less variable. Possessing utility, commodities derive their exchangable value from two sources, from their scarcity and from the quantity of labor required to obtain them." Ricardo afterward takes in the quality of labor, and the amount of capital invested in production, the durability of the capital and the frequency with which it can be turned over, and denies that there can be any absolute standard of value.

Mill defines value as the general power of purchasing commodities as distinguished from price, which is the power of purchasing money only. Mr. Mill sometimes speaks of "the natural value, *i. e.*, the cost of production," as if the quantity of labor only were in his mind, and at others of "the cost of production with the ordinary profit, in other words such as will give to all producers the ordinary profit on their outlay," thus recognizing capital as the producer.

* "Social Science Condensed," by McKean, p. 197.

in a certain peculiar and rather evasive and secondary sense, but it is born rather of the love of paradox, and fondness for antithesis, which distinguishes the aggressive mind, than of the accuracy of scientific exposition. For instance, as man increases in civilization many things become useful to him for which as a barbarian he could have no use, such as books, paintings, implements of industry, money, etc. As to society at large, they undergo a decline in value, *i. e.*, in cost, *pari passu* with their increase of utility to the individual, because as they are more numerously made they can be made at less cost. But it could not be truly said, as to a savage ignorant of the use of money, for instance, that as he became acquainted with its use its utility would increase but its value would decline. While a savage it would have neither utility nor value. And to the individual advancing from barbarism to civilization its value and utility would grow together. So it could not be said of the land on which a ten-story building is erected in New York City that its value declines as its utility increases. It is useful in proportion to the number of people it accommodates and the volume and value of the exchanges effected in its rooms and offices. But just in this proportion do its rents rise, which constitute its value. Carey arrives at his paradox by considering utility and value only relatively to collective society at different periods of time, and relatively to manufactured goods. It may be truly said that as man advances in civilization, food, books, and implements accomplish more good for mankind at large and cost it less. They are, therefore, to man, collectively, more useful and to each individual less costly. But it could not be said in the case of an individual that the more useful his services become to society or to himself the more their value would decline.

So far as scarcity is an element in the cost of useful goods, the fact of their utility tends to so concentrate human effort on their production as to cause a decline in their value. In this way utility tends to destroy cost by multiplying the useful thing. This is a view of value which is limited to producible objects, when looked at from the standpoint of collective society, and the comparison relates to successive periods of time. An unproducible object, a picture by Raphael for instance, may grow dearer while cotton goods are growing cheaper.

34. Fallacy of Resting Value on Labor.—In fact, however, the labor of the man who either has no skill or power or spirit or opportunity to do anything has no value, as the man

himself is a mere walking appetite, consuming and not producing. Labor rises in value where there is competition among employers, and falls in value where there is only competition among laborers. What Dr. Smith assigns as the causes of the invariableness in the value of labor are both untrue and inadequate. It is not true that the laborer's surrender of ease, liberty, and happiness is equal in all cases. In some cases, and to some persons, labor is a pleasure, and just the class of amusement the laborer would delight in if he got no pay whatever. In other cases the toil is very irksome and of a kind that many persons having the power to perform would not perform at any price. Again, a "surrender of ease, liberty, and happiness" is not a basis of value. It can not be measured. It has no desirable quality in it, to the purchaser of the labor or its product. He does not think of it.

There is a more direct and logical reason why labor can not be a measure or standard of value, viz.: that it has no value in itself and can not have, since as fast as it creates value the value passes into the form of wealth or capital which it creates. As distinguished from capital, which includes all labor performed, labor is really labor awaiting performance. In short, the term labor is an abridged term, the full term being "capacity to labor." Before a man begins his work for the day, that day's work can not yet be said to have a value, because, not having been done, it does not exist, and that which has no existence can have no worth. When the day's work is done the whole value to which it has given rise can not be said to inhere in the labor as a separate entity from the thing upon which the labor was done, for, the whole object of the labor being to add value to that thing, all the value to which it has given rise is in the thing, and the labor, as an entity apart from the thing on which it was done, having ceased to be, can have no value. Hence, though labor supplies the commodity to which value attaches, the value itself, as fast as it exists at all, is in the commodity, and not in the labor. The sole value of labor is the value it exchanges for, viz.: its wages.

To this it may perhaps be objected, if there be no value in labor, why does it exchange for value, viz., for wages? Wages are paid to induce the performance of the labor which will produce or supply the commodity. Wages are a payment for service; and, since nobody values services for their own sake, but only for what they will effect or produce, it follows that the value or the element which is appreciated will always be in the ulterior thing which labor is performed to supply. For instance, A is employed

by B to catch wild pigeons. For this purpose A walks two miles early in the morning to the place where the pigeons are expected to fly. He builds a bower house to hide behind; prepares a floor carefully for the pigeons to light upon; spreads corn upon it, and lays his net carefully at its border, so rigged that by pulling a rope he can spring the net over the floor; mounts his stool pigeon, lets loose his flying pigeons to attract the wild game, retires to his bower house, and loads and primes his gun, to be ready to shoot such pigeons as shall alight on the spar. All these acts are his labor, but can it be said that they contain any value in themselves? They may all be performed and no pigeons appear. In that case A would have earned his wages if he worked by the day, because he would have performed the service agreed on. But the performance of the entire service would give rise to no value. All that B values is the pigeons. He values not the walk, the net, the corn, the gun, the bower, the spar, the stool pigeon, or the flyer. All these are parts of the service, but no part whatever of the value. If, however, on the tenth day of waiting, a flock of two hundred and fifty pigeons is snared, netted, and bagged, then he gets for the first time value, though he had, on all the other days, had the same amount of labor and service, but in the labor and service of the previous days there was no value whatever.

35. Whence Comes Value? The Consumer.—Value is not the result of the labor and service being performed, but, on the contrary, the labor and service are performed in order to get the value. Value in the foregoing instance expresses the degree in which the pigeons are desired by B, which estimate induces him to employ A to trap them. Value, or the feeling or perception that there is value in an object, is what induces, creates, and causes all labor to be performed. Because we believe corn will be worth fifty cents a bushel we plant it. It is the expected value that causes and brings into existence our labor, not our labor that causes or creates the value.

While producers of commodities seek, in producing them, to obtain value, and produce them only because they expect them to have a value, it is not they that give the value which they hope for, since that value is the appreciation felt for the commodity by the purchaser, or objectively it is measured by the return commodity or service which the purchaser will pay for it. In short, we thus trace value back to the demand for consumption, and arrive at the truism that, while the producer of the commodity produces

the supply, the consumer makes the demand ; and it is this effective demand, meaning what the consumer will give in exchange, that causes and fixes value.

But, since demand for consumption regulates value, and value regulates the quantity of labor which will be employed in producing the thing in demand, our circle brings us back to the point that, in a general way, the quantity of labor which will be put into the production will be proportionate to the value, but not for the old supposed reason of Adam Smith that the labor creates the value, but for the more accurate reason that the value (or demand) creates (regulates the quantity of) the labor which will be invested in supplying it.

This deduction of value from demand furnishes us with that long-sought "wage fund," which has been to the economists what the philosopher's stone was to the alchemists, successively a faith, a fraud, and a truism.

The wage fund is so much of the expected price, to be obtained for commodities, as enterprisers will advance in payment for labor-time, and for organized obedience to the employer's will, rather than forego the prospect of the profit, which the enterpriser expects to reap out of the remainder of such price, after paying such wages, and also repairs, interest, rent, insurance, taxes, wear and tear, etc. For, though the hope of profits is the lure that tempts the enterpriser from the beginning, the actual realized profits are the last distilled residuum that remains after every cost of production has been paid.

36. The Consumer's Place in Industry.—Because each particular commodity must be produced before it can be consumed, economists have been led to assume that the natural order in economics is to treat production as a fact philosophically antecedent to consumption.

In history, consumption precedes production. Nearly all animals consume, without producing anything for consumption, except as their bodies become food for others. Bees, ants, beavers, and other social animals, however, produce social wealth of their own kind as truly as does man, and practice socialism and communism, but no conscious or intentional exchange of services. Singularly enough the instant animals begin to claim domain or property, as social birds and herds all do, or produce wealth, as ants, bees, and beavers, they organize on the principle of the division of labor and ranks of society, bosses and workers, soldiers, sentinels, guides, as do men in the tribal or communal state. In

the savage state man aims to subsist as animals do, entirely upon nature, but the scarcity of objects for consumption induces him to supplement nature by care, first by keeping his own flock, herd, poultry, and pigs instead of hunting the boar, buffalo, and pheasant, then by planting roots instead of digging them, until he becomes a systematic producer, first for his own use, and then for others.

Since consumption is the prior and imperative motive whose imperious necessities suggest and compel at all times the course which production will pursue, it is obvious that as a cause in economics consumption takes the lead and stands in the same relation to production as the horse does to the cart, as the propelling power and the steering force. It is the prices proclaimed in the market that rule production in the factory and furnace, compelling a shut-down or an increase of labor. It is the prices made known on the produce exchange that control the operations of the farm and induce farmers to stop raising corn and raise cattle or fruit or tobacco. Nor is it the prices which an article had last year, or even last month, but those which it is expected they will have next month or next year, which are potential in causing production. Hence MacLeod's aphorism or fundamental principle that "speculation is the mother of production" follows logically and closely upon his previously enunciated principle that "demand is the cause of all value."

Hence it is, too, that the German socialists Karl Marx and Lassalle start by adopting the theory of value usually credited to Adam Smith, and certainly held by Ricardo, that "labor causes all value," and from thence infer that the function of ascertaining the demand is a useless one in industry, as it certainly would be if labor were capable of causing value. As it makes no difference, according to the socialistic idea, whether a thing is demanded or not, provided labor be expended upon it, no such contingency as risk or loss is contemplated as being necessary, and hence no reason exists for the *entrepreneur* or profit-maker, and no acknowledgment is made by the socialist that society makes any gain by having all its industries begun and all its machinery of industry introduced at the private risk and loss of the same profit-making class which derives the dividends from capital in its successful ventures. Hence, also, socialism denounces all profit as a deduction from the just wages of labor, all profit-makers as robbers of labor, and all speculators as criminals.

37. Karl Marx's Theory of Value.—The notions of

Marx,* though elaborated with detailed complexity of statement, may all be resolved into the single proposition that as labor creates all wealth the laborer ought to own all wealth, relieving society of the capitalist as a superfluity in the industrial system. His first sentence is :

"The wealth of a community in which the capitalist mode of production prevails appears as an immense collection of commodities, the single commodity being its elementary form."

To be exact, Marx should have defined not what wealth "appears as," but what it is. It is true that wealth "appears as" commodities, but it "is" the power its owner has, by means of those commodities, to command the services and products of man and the forces of nature. This conception connotes and implies that there must be others who, not having the wealth, are in that state of need, or want, or poverty which causes the command to be obeyed from a sense of interest, in order to get the commodity whose possession by one competent to use it is wealth, not in the commodity, but in its owner.

By thus defining what wealth appears to be, viz., a physical object, and not what it *is*, viz., a social power, Marx avoids bringing into view the fact that wealth is not an absolute but a relative fact, inconceivable except as the antithesis to the opposite idea of the need of wealth or the want of the commodity for use and consumption. Those possessing it are indebted for the power it confers to the fact that those lacking it have need. This relativity in the idea of wealth, whereby want becomes the opposite phase of the same fact and essential to its conception, will easily be grasped by reflecting how long one would have to wait to get his boots blacked by another person if every other person had the wealth of a Vanderbilt. Again Marx says :

"It is thus only the quantity of socially necessary labor, or the socially necessary time of labor for the establishing of a use value [meaning the creation of a commodity] which regulates its extent of value."

This statement involves one juggle, or unnoticed substitution of one source for value in place of another, and one mistake of a consequence for a cause. If labor alone were the cause of value, then whatever a man worked at would be valuable in proportion to the labor spent upon it. It would need no other con-

---

*"Capital ; A Criticism of Political Economy." The extracts are given as translated by John Broadhouse in *To-day*.

dition. When Marx prefixes to labor, however, the qualification "socially necessary" he really undermines labor as the sole cause of value, or as any cause, and sets up a different and wholly adverse cause, viz., the demand or desire of society. As these two factors, viz., the "labor invested in an article" and the "social demand for the article," stand in no relation to each other, except as the social demand for the article may cause labor to be invested in it, to say that social demand causes value is to admit that labor is not the cause of any value, since if social demand can cause the value, it can intensify or slacken without the least regard to how much or whether any labor is invested in the article, and as the social demand intensifies or slackens, the article must rise or fall in exchange value.

This juggle reveals the substitution by Marx of the consequence in place of the cause. For if social demand regulates value, it will also regulate profits and losses, which are the excess or deficiency of value over or under cost of production. But whatever regulates profits must regulate the quantity of labor which will be devoted or expended in the production of that from which the profit is obtained, as it is only the profit-maker who will or can employ mere naked labor, viz., labor as divested of implements, means of support, capital, organization, or job, at all. Hence Marx's effort, to make value depend on quantity of labor expended, is pregnant with an admission which makes human desire to be both the cause of value and the regulator of the quantity of labor which will be expended, in every branch of production, while the profit-maker, as a steerer of labor in accordance with social demand, looms up as the one worker whose service is of all others the most socially necessary.

At the outset, Karl Marx's aphorism might be met by the counter proposition that as wealth is the power to command all products of labor, all forms of service, and all the productive forces of nature, it becomes, so far as one possesses it, a dispensation from labor. Indeed, it is in order to relieve himself from labor that the laborer strives to get wealth. If he had actually got it in the quantity required to make him comfortable both as to the present and the future, he would cease to labor. Thus the realization of the Karl Marx gospel, that the laborer should own all wealth, would instantly abolish the function of wealth itself, for that which all possessed, in a degree equal to the desires of each, would no longer command the services of any. And in a state of things in which none could command a single human service, ex-

cept his own, all would be paupers, and the condition barbarism. The process of reasoning by which Karl Marx begins with Ricardo, and ends with thuggism, is this:

(1.) All wealth is in commodities.

(2.) A commodity is a product of human labor socially necessary, and therefore having value in exchange.

(3.) The value in the product is proportionate to the quantity of socially necessary labor, or socially necessary time of labor, spent in producing it.

(4.) The interposition of capital, or of the *entrepreneur*, to employ labor, is not "socially necessary labor," but is only a privilege of deducting and appropriating half the product of all socially necessary labor without rendering any part of the service.

(5.) Hence, the employment of labor by the capitalist or *entrepreneur* is in all cases a robbery of labor to the extent of the whole share won by the capitalist as profits.

(6.) When capitalists are eliminated, commodities will exchange against each other according to the quantity of socially necessary time of labor involved in them, and the unit of money and standard of values will be the certificate of associated labor, that the bearer has performed an hour or a day of labor, which certificate will supersede gold and silver as money, remain always at par with commodities, put an end to speculation, profits, interest, and all the oppressions of capital, and make it possible for everybody to get what he wants by tendering to associated labor an equivalent, in his own time, to that expended in producing the thing he wants, drawing his certificate, and forwarding it as a draft on the producer. Thus the elimination of capitalists will bring in the millennium! All of this is economic madness. If, as in the case of the seven anarchists at Chicago, this madness takes the form of attempted revolt against society, the plea in defence which would best consist with the facts, and at the same time with legal principles, would be that they become socially insane by attempting to handle social problems to whose right apprehension they are unequal.

38. Why Men Exchange.—Some forms of wealth have no function but to be consumed, and their economic use in any other way than as the subject of exchange consumes them directly. Such are food, clothing, such raw materials as undergo a change of structure in manufacture, fuel, drink, and, according to the form of statement adopted by Carey and others, labor, or rather labor-time, which, if not purchased at the instant it exists,

perishes forever.* Other forms of wealth are neither perishable nor enjoyable, except in an indirect and secondary way, and are only consumable by wear and tear in their use, over long periods, as means of creating, distributing, transporting, or transforming commodities. Such are all roads and the means of transportation over them, all mills and factories and their machinery, all ships and vessels, land used for farming, residence, mining, or business-blocks for rental, the shares and stocks, debts, and securities to which these give rise, and all property held and used because of its power to aid man in the production of wealth.

Two principles concerning value have much to do with giving rise to this distinction between the two kinds of wealth, viz., consumable wealth and reproductive wealth.† These are:

(1.) Of any one kind of consumable wealth a man's capacity to make a pleasurable personal use is limited by nature with great rigidity, while his capacity by aids of various kinds to produce this kind of consumable wealth is almost unlimited.

(2.) The portion of consumable wealth which he can produce above his own power to consume, (called his market product or surplus), would have no utility could he not find some person who needs it and is able to give a return service in exchange for it. This ability, and desire, to give a return service, is economic want or effective demand. In consequence of these four facts, viz., the limit on his own consuming power, the absence of limit on his producing power, the inutility of his own surplus to himself, and

---

* *Carey* ("Unity of Law," p. 184) says: "Of all commodities or things the only one that disappears on the instant of its production is labor-power or human force, mental or material. If not instantly utilized, it passes away, lost forever."

We have already shown, ante p. 85, that, if used as well as if not used, the labor-power, considered with reference to its capacity of containing value, also passes away, into the commodity or product to which it gives its value. So that, whether used or not, labor-power never contains in itself value, since it is not a thing *in esse*, but in *potuisse*. When done, it is in the commodity, and in the wages. Until then it is not.

† *Prof. Henry Sidgwick* says ("Principles of Pol. Econ.," 86): "This . . . shows the need of a broad distinction between the two portions of a country's material wealth, which we may distinguish as consumer's wealth and producer's wealth respectively. By consumer's wealth I mean such material things as, like the consumable services before distinguished, are directly available for satisfying human needs and desires. Producer's wealth and, similarly, of course, producer's services being only useful indirectly as a means of obtaining the former."

Jevons ("Theory of Pol. Econ.," p. 43) says: "The theory of economics must be given with a correct theory of consumption. Lord Lauderdale says the great and important step towards ascertaining the causes of the direction which industry takes in nations seems to be the discovery of what dictates the proposition of demand for the various articles which are produced. . . We labor to produce with sole object of consuming."

the fact that another person exists who will effectively demand the surplus, giving an exchange surplus of his own production for it, it comes to be a law of value (1) that all surplus products of human industry have value to their producer only as he can forward them to the point of economic need, and (2) that such products reward their producer, or rise in value, in the degree that they are forwarded to the point of greatest economic need or most effective demand. This tendency of values to decline unless commodities are exchanged, and to advance as they approach the point of effective demand, which is always the point of final consumption, is the cause of exchange. But while a man's capacity to consume any one form of directly enjoyable wealth, such as food, clothing, and shelter, is rigidly limited by nature, his capacity to multiply his secondary or social wants, so as to extend his social power by acquiring custody over those forms of imperishable or very slowly consumable wealth, such as residences, parks, equipages, pictures, statuary, libraries, diamonds, lands, means of transportation and manufacture, machinery, etc., the use of which must in their nature be shared with society in order to be profitable to himself, is without limit. This results in a division of all values into three chief kinds, viz.: wealth directly and quickly consumable in sustaining life; wealth very slowly consumable in ostentation, a mode of consumption in which the possessor necessarily shares his enjoyment with a smaller or larger segment of society; and reproductive wealth, of which society has the use and the owner only the income. The kinds of wealth of which man has an unlimited faculty of acquisition, corresponding to his unlimited power of production, are therefore more and more socially consumable, and less and less individually consumable, the larger his wealth becomes and the further it is removed from mere sustentation. In plain words, the more he gets, above his bread and butter, the less eatable his wealth becomes, and the more he is compelled, by the nature of the wealth he acquires, to give its actual use to society, while he retains toward it only a relation of supervision and government. By this constitution of man's nature, he is furnished with an unlimited capacity, both for producing and acquiring wealth, without being able to materially increase the quantity which he can permanently deduct from the general stock for his individual consumption. He may obtain the mastery of many relations toward his fellow men, and of many social powers, but the profit he can make out of them depends on the degree in which he shall subordinate all to the one

chief, unconscious and instinctive purpose of society, viz., to forward all enjoyably consumable wealth, from the point where it exists in surplus and satiety, to the point where most economic return effort is being made to obtain it, and where, therefore, there is most effective demand for it. This, therefore, may be named semi-social Wealth. The economic facts or forces, in commodities and services, which thus compel their distribution among consumers, are the fall of values with satiety, and their rise with desire, acting upon the human instinct of gain or sense of value.

39. The Theory of Value.—Prof. Jevons regards Hermann Heinrich Gossen as having been the first (in 1848) to treat economics as a theory of Pleasure and Pain, being the theory of the procedure by which each individual, and the aggregate of individuals constituting society, attain the maximum of pleasure with the minimum of painful effort.

Gossen* states, as the law which compels man to find his highest pleasure in a change of pleasures, or in variety, that increase of the same kind of consumption yields pleasure, continually diminishing up to the point of satiety—[at which point, he might have added, it begins to yield pain, continually increasing up to the point of destruction].

He classifies useful objects (wealth), as, (1) those which possess pleasure-giving powers in themselves, (styled in the present treatise enjoyable wealth, or by Prof. Sidgwick consumer's wealth) ; (2) those which only possess those powers when in combination with other objects, (styled in this work ostentatious wealth) ; and (3) those which only serve as means toward the production of pleasure-giving objects, (styled by Prof. Sidgwick "producer's wealth," in this work reproductive wealth, or semi-social wealth).†

---

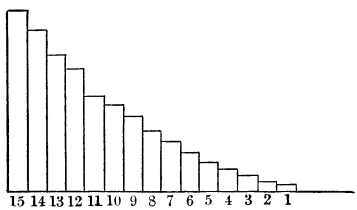
* "Entwickelung der Gesetze des Menschlichen Verkehrs, und der daraus fliessenden Regeln für menschliches Handeln." ("Development of the Laws of Human Commerce and of the Consequent Rules of Human Action.")

† Senior (Encyclopedia Metropolitana, Art. Political Economy, p. 133) had already stated the Law of Variety in human requirements from its economic side, as Fourier had done from its philosophic side. "The necessaries of life are so few and simple that a man is soon satisfied in regard to these and desires to extend his range of enjoyment. His first object is to vary his food ; but there soon arises the desire of variety and elegance in dress ; and to this succeeds the desire to build, to ornament, and to furnish, tastes which, where they exist, are insatiable, and increase with every improvement in civilization."

T. E. Banfield, of Cambridge, in lectures on the organization of labor, in 1844, said : "The first proposition of the Theory of Consumption is that *the satisfaction of every lower want in the scale creates a desire of a higher character.* If the higher desire ex-

Starting from these bases, Prof. Jevons says, the utility of all objects to any one person is not a constant quantity, but declines as satiety is reached, decreasing as the quantity increases, until it becomes a disability or a mischief. Water, in its totality, is the favorite example of a useful substance. To a thirsting traveler a glassful may mean rescue from death. A deluge would be death itself. A single meal to a hungry man has great utility. A second meal has none to him, but will have as much as the previous one in five hours. Dividing the quantity of food a person will consume in twenty-four hours into ten equal parts, if his food be reduced by the last part he will suffer but little ; if by the second tenth, he will feel the want distinctly ; the third tenth will be injurious. When half is reached only time is required to complete his starvation. If each of these tenths be called an increment, their utility varies in the order indicated in the diagram, proceeding from right to left.

Another and more practical mode of stating this variation of utilities with supply had been made by Dr. Davenant or Gregory King* in an essay on the balance of trade, as follows :



"We take it that a defect in the harvest may raise the price of corn in the following proportions :

Defect		Above the Common Rate
1 Tenth		3 Tenths,
2 Tenths	Raises	8 Tenths,
3 Tenths	the Price	1 and 6 Tenths,
4 Tenths		2 and 8 Tenths,
5 Tenths		4 and 5 Tenths.

isted previous to the satisfaction of the primary want, it becomes more intense when the latter is removed. The removal of a primary want commonly awakens the sense of more than one secondary privation. Thus a full supply of ordinary food not only excites to delicacy in eating but awakens attention to clothing. The highest grade in the scale of wants, that of pleasure derived from the beauties of nature and art, is usually confined to men who are exempt from all the lower privations. Thus the demand for and the consumption of objects of refined enjoyment has its lever in the facility with which the primary wants are satisfied. This, therefore, is the key to the true theory of value. Without relative values, in the objects to the acquirement of which we direct our power, there would be no foundation for political economy as a science."

* Cited in "Theory of Political Economy," by Jevons, p. 168.

So that when corn rises to treble the common rate it may be presumed that we want above one-third of the common produce; and if we should want five-tenths, or half the common produce, the price would rise to near five times the common rate."

Thornton* doubts the accuracy of this estimate, but Tooke† and Chalmers‡ both approve or confirm it. Tooke says the price of corn has repeatedly risen from one hundred to two hundred per cent. when the utmost computed deficiency of the crop has not been more than one-sixth to one-third of an average. Chalmers says "the necessaries of life are far more powerfully affected in the price of them by a variation in their quantity than are the luxuries of life. Let the crop of grain be deficient by one-third in its usual amount, or rather let the supply of grain in the market, whether from the home produce or by importation, be curtailed to the same extent, and this will create a much greater addition than of one-third to the price of it." This theory has been fully sustained by facts.

Henry C. Carey shows§ that a crop of cotton six times as large in the year 1840 as in the year 1815 brought but little more than the crop of 1815, and not enough more to pay for the added cost of transportation.

The agricultural reports published by our government show that seven leading crops in the United States in a scant year, 1881, sold for more money than the same seven crops in the abundant year, 1880. Crops which were less by 710,678,007 bushels sold for $127,688,623 more because of their diminished quantity.‖

Tooke estimates** that in 1795 and 1796 the farmers of England gained seven millions sterling, in each year, by a deficiency of one-eighth part in the wheat crop, not including the considerable profit on the rise of price of other agricultural produce. In each of the years 1799 and 1800, again, farmers probably gained eleven millions sterling by deficiency (Jevons' "Theory of Political Economy," p. 172).

Prof. Jevons' statement, of the decline of utilities with satiety, needs to be supplemented with the statement that the utility returns as the article is forwarded from the person to whom it rep-

---

* "Inquiry into Nature and Effects of the Paper Credit of Great Britain," p. 270-271.

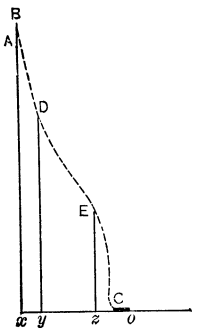
† "History of Prices," vol. i., pp. 13-15.

‡ "Christian and Economic Polity of a Nation," vol. ii., p. 280.

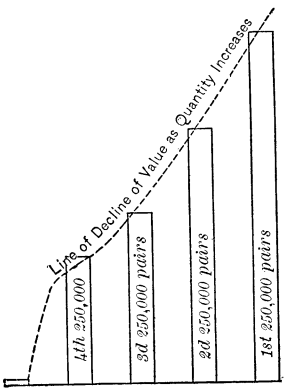
§ "Harmony of Interests." ‖ Lecture by Henry Carey Baird in Brooklyn.

** "History of Prices."

resents a surplus, drug, nuisance, or, as Jevons calls it, a discommodity, to the person whom it will commode, and to whom it is a commodity. A farmer in Dakota can consume for his own personal food six bushels of wheat per year, for that of his family 30 bushels, and for that of all his servants and as seed 2,000 bushels ; but he can produce 200,000 bushels. In the absence of a market 198,000 bushels would drop in value in the manner indicated by line BC, Ax indicating the utility of the first 6, Dy of the next 30, and Ez of the next 2,000 bushels, which is far beyond the limit of personal utility, since a few quarts may suffice as seed for planting, had he no market. The 198,000 bushels, in the absence of a market, would have so small a utility that they would not have been produced at all.



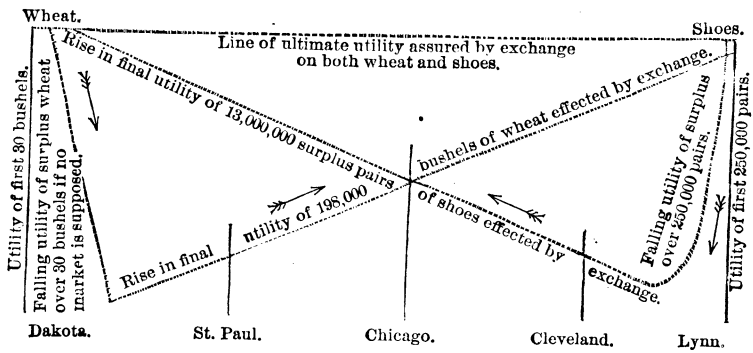
Meanwhile, however, there is a point, viz., Lowell, or Lynn, in Massachusetts. where shoes are being made in surplus, the utilities of which sink with like rapidity, say in all for Lynn 14,000,000 pairs for a population capable of wearing 1,000,000 pairs per annum. Of this 1,000,000 pairs, the utility declines rapidly, as the last 250,000 pairs are by no means so necessary as the first. The decline in immediate utility in the absence of a market might be as follows :



The utility of the 13,000,000 pairs which the people of Lynn, in the absence of a market or effective demand, could only lay by as a supply for 13 future years, would be so small that it would not have sufficed to induce their production.

By distributing, however, the 13,000,000 pairs among 3,000,000 persons each pair takes on a utility equal to that which the first 1,000,000 pairs find to the people of Lynn, *i. e.*, their utility rises

to the point of indispensable necessity. This rise, however, requires lapse of time, changes of place, and several changes of ownership. Hence the final utility is established and known as being equal, for the entire 13,000,000 pairs, to the utility which the first 250,000 pairs needed for present wear would have had to the people of Lynn, the moment it is known that a population exists anywhere which will make a return of effort in supplies of wheat equal to that made by the Lynn people in supplying shoes. But this final utility takes the form of added value, only with each step of service whereby the shoes are expedited toward their consumers, where alone the maximum of final utility and value is restored. The movement forward, of the two surpluses, shoes and wheat, may be illustrated and the values they acquire may be shown thus:



Prof. Jevons will seem, to some persons, to qualify his doctrine that value is not caused by labor, by the following statement (P. 178, "Theory of Pol. Econ."): "But though labor is never the cause of value, it is in a large proportion of cases the determining circumstance, and in the following way: Value depends solely on the final degree of utility.* How can we vary this degree of utility? By having more or less of the commodity to consume.† And how shall we get more or less of it? By spending more or less labor in obtaining a supply. According to this view, then, there are two steps between labor and value. Labor affects supply, and supply affects the degree of utility which governs value,

* *I. e.*, the utility or degree of effective demand which an article has to its consumer, *i. e.*, what return he will make to obtain it.

† *I. e.*, to increase its quantity, and therefore to lower its value.

or the rate of exchange. In order that there may be no possible mistake about this all-important series of relations, I will restate it in tabular form as follows:

> Cost of production determines supply,
> Supply determines final degree of utility,
> Final degree of utility determines value."

It is evident, however, that cost of production determines supply, in the sense that as cost of production diminishes the supply increases; that supply determines final degree of utility (or consumer's value), in the sense that as supply increases the value to the consumer lessens ; and hence that looking at the question as Jevons here does, with reference to the effect that collective (not individual) labor has on the value of collective commodities, it leads to the conclusion that the greater the quantity of labor applied to their production the more they decline in value. This, however, makes labor a regulator of value, as Jevons says, but only as a reducer of value, whereas the Smith-Ricardo-Marx doctrine sought to make labor only, always, and proportionately the source of rise in values. What seems, at first, a qualification of Jevons' dissent to the theory which bases value on labor, becomes, on analysis, a statement that labor is often a destroyer of value.

40. Markets Are the Index of Values.—The aggregate of all the demands for an article being the criterion which determines how much of it can be sold, and the aggregate of all the sources of supply determining in like manner how much of it can be purchased, it becomes important that those who have the article to sell and those who have it to buy should all meet in a common spot, so that the most rapid communication may be had between each buyer and every seller, until that buyer who will pay more or buy more than any other buyer, and that seller who will sell more or take less than any other seller, shall meet face to face. The rate at which these two interchange is the market or current price. Numerous other transactions may occur, but they will be above and below the market.*

---

*Even in the earliest and simplest conditions of trade, markets, fairs, and bazars tend to establish themselves as the means of satisfying each buyer and seller that he is buying as cheap, or selling as dear, as the ratio of the supply to the demand admits. Throughout most parts of Central Africa the travelers find fairs conducted largely by women. In Asia and primitive Europe they are held everywhere except where great towns with ample stores of goods of every kind have superseded the fair by furnishing a more varied and better form of market. Indeed, the periodical fair is the natural predecessor of the market town. The Eastern and Michaelmas fairs at Leipsic, and of

It is a singular fact that markets have been the subject of popular prejudice and moral objection, almost in proportion to the perfection with which they economize time, transportation, and effort and equalize prices. The proper meaning of a market is not merely the place set apart, in which buyers and sellers may meet with their goods, but all that territory, with its groups of buyers and sellers, consumers and producers, of which the residents are so brought into union and contact with each other, by the mutual intelligence which arises through reciprocal commerce, that one price is arrived at by all with facility and promptitude.*† A market rises into its highest efficiency and value

---

Frankfurt on the Main in Germany, of Keachta in Siberia and Nishni Novgorod in Russia, of Zurzach in Switzerland, Pesth in Hungary, Bergamo in Lombardy, the cattle fairs of the Scottish Highlands still have a wide celebrity. The great London, Paris, Berlin, New York, and Philadelphia world's expositions of products are stimulated by the same motive on the part of exhibitors. Though they make no sales, their object is sales by sample so far as manufacturers and merchants are concerned. In all cities the dealers in certain commodities by a common instinct of buyers and sellers concentrate in certain streets, as banking and brokerage make a money market of Lombard Street, London, and Wall Street, New York. The swamp in New York is the traditional market of the leather trade. When the wholesale dry goods trade removed in 1857 9 from Pearl and Front streets to Park Place, Warren and Chambers streets, real property in the former "dry goods market" fell to one-tenth its former rental, until it became the oil market, when it revived. The bonnet trade of New York formerly centred in Division Street so exclusively that it was difficult to buy elsewhere. The book trade in all cities has its own center, the lumber trade another, and even the professions concentrate in one spot, seeking equality with competitors, and the other advantages incident to a market, as the law trade in London centers at The Inns of Court, etc.

* *Cournot* ("Recherches sur les Principes Mathematiques de la Theorie des Richesses," Paris, 1838, p. 55) says: "On sait que les economistes, entendent par *marche*, non pas un lieu déterminé ou se consomment les achats et les vents, mais tout in territoire dont les parties sont unies par des rapports de libre commerce, en sorte que les prix s'ynivellent avec facilité et promptitude."

† *Jevons* ("Theory of Pol. Econ.," 92) says: "In economics we may usefully adopt this term with a clear and well-defined meaning. By a market I shall mean two or more persons dealing in two or more commodities, whose stocks of those commodities and intentions of exchanging are known to all. It is also essential that the rates of exchange between any two persons should be known to all the others. It is only so far as this community of knowledge extends that the market extends. Any persons who are not acquainted at the moment with the prevailing rates of exchange, or whose stocks are not available for want of communication, must not be considered part of the market. Secret or unknown stocks of a commodity must also be considered beyond reach of a market so long as they remain secret and unknown. Every individual must be considered as exchanging from a pure regard to his own requirements or private interests, and there must be perfectly free competition, so that any one will exchange with any one else for the slightest apparent advantage. There must be no conspiracies for absorbing and holding supplies to produce unnatural ratios of exchange. Were a conspiracy of farmers to withhold all corn from market, the consumers might be driven by starvation to pay prices bearing no proper relation to the existing supplies, and the ordinary conditions of the market would thus be overthrown."

when it concentrates into one focus so large a portion of the buyers and sellers of a certain commodity as to become, in conjunction with one or two other markets of the same kind, an authoritative standard of prices of the articles in which it deals, for all buyers and sellers throughout the world. By aid of the quick intelligence which the telegraph supplies and of the swift transportation which steam affords, the whole world is thus converted into one market, having one price, subject only to cost of transportation of the product between the point for which the price is quoted and all other points. Such markets are the Bourse of Paris, for stocks and securities, the London Stock Exchange as well as the London Produce Exchange, the Liverpool and New York Cotton Exchanges, the New York Stock Exchange, Produce Exchange and Real Estate Exchange, and formerly the Gold Room and the Boards of Trade (Grain and Provision Exchange) of Chicago, in conjunction with those of the other Western cities and that of Liverpool.

Concerning these exchanges Prof. Jevons says: "The theoretical conception of a perfect market is more or less completely carried out in practice. It is the work of brokers in any extensive market to organize exchanges so that every purchase shall be made with the most thorough acquaintance with the conditions of the trade. Each broker strives to gain the best knowledge of the conditions of the supply and demand and the earliest intimation of any change. He is in communication with as many other traders as possible, in order to have the widest range of information and the greatest chance of making suitable exchanges. It is only thus that a definite market price can be ascertained at every moment, and varied according to the frequent news* capable of affecting buyers and sellers. By the mediation of a body of brokers a complete consensus is established, and the stock of every seller or the demand of every buyer brought into the market. It is of the very essence of trade to have wide and constant information. A market, then, is theoretically perfect only when all traders have perfect knowledge of the conditions of supply and demand and the consequent ratio of exchange; and in such a market, as we shall now see, there can only be one ratio of exchange† of one uniform commodity‡ at any moment.

* It is notable that this news never relates to the labor cost of producing the commodity, as it should if the theory is correct which is contended by Adam Smith, Mill, Ricardo, and Karl Marx, though it does relate always to the cost of reproducing it at the present moment, or more properly to the extent of supply and demand.

† Meaning price. ‡Usually called "grade of goods."

A market, in the broadest sense, is therefore a place where the facts relating to supply and demand are converted, through an attrition of human intelligence and interest, into prices; in short, it is a price mill.

41. Freedom in Establishing Prices.—Whether trade can, in these markets of exchange, with advantage to any class or to the cause of business integrity and virtue, be restricted by legislatures, and whether these restrictions can be profitably and beneficially administered by courts, has been the subject of much controversy. Boards of trade usually establish a system of arbitration, or of courts within themselves, which are more satisfactory to their own members than the exterior courts of justice of the state, both because of their greater promptness and of their nicer familiarity with the class of questions arising in the transactions of the board. To the extent of the powers of such boards or markets, therefore, all appeal by members to the courts of law is discouraged.*

An extensive opinion prevails, however, that the offense anciently known as forestalling, and now known as "cornering the market," can with prudence, and ought in sound morals, to be forbidden by law, and restrained or punished by the courts. This is an economic question, at the bottom, since the *morale* or ethics of the transaction depends on whether the public and general interest is promoted by leaving men perfectly free to trade as they will, or by an interference of the state in restraint of this freedom.

The grain trade, wherever carried on extensively, involves essentially at least eleven parties, viz., (1) the farmer who raises the crop, and first sells it to the buying agent of the dealer, on the Board of Trade, or commission man; (2) the buying agent; (3) the dealer on the board or consignee; (4) the railroad or carrier who brings the grain itself to market; (5) the inspector or officer, jointly appointed by the city and the Board of Trade to receive the grain when it arrives, inspect it on its way from the car or boat in which it is brought into the bin where it is to be stored or "warehoused," who assigns it judicially its proper grade according to quality, and thereupon orders it into the proper bin, where it is usually blended, but may not be, with other grain of like grade, and who also issues the grain certificate to the con-

* This seems to have obtained from a very early date, as the petty markets of *pied-poudre* in England testify.

signee of the grain as for a given quantity, say 10,000 bushels (or 100,000), of "Michigan white wheat" or Minnesota No. 1, or Kansas No. 2, as the case may be, stored in Iowa Elevator A, in a bin designated by proper marks. This grain certificate is thereupon the proper evidence of title to the grain, and is the thing bought or sold on the board, as a substitute for the grain, whenever grain is sold by grade, though grain may still be sold by sample, as well as by grade; (6) the warehouseman, who is a peculiar kind of a bailee or storer merely, and has no title, but only custody for the Board ; (7) the Board of Trade or aggregate mass of buyers and sellers being virtually the market, on which the grain is offered and which is in close monetary communication with all other centers of supply and demand; (8) the seller of the grain certificate; (9) the buyer or buyers; (10) the purchaser for shipment or consumption; (11) the miller, baker, or manufacturer in the Eastern States or Europe who orders the purchase generally, sometimes in advance, and awaits the arrival of the grain.

Supposing the Board opened, the holders of grain, and the holders of money for investment in grain, necessarily form two parties, the former wanting grain to go up, the latter wanting it to go down. Those who have sold grain, agreeing to deliver it at a time stated, and have not yet got the grain for delivery, want grain to go down, so that they can fill their contract below the rate at which they have agreed to deliver. Those who have bought grain agreeing to take it at a future date at a stated price, wish it may go above that price, so that they may reap the difference. The former are bears ; the latter are bulls. The former have "sold short;" the latter have "gone long."

Three independent economies exist in the practice of buying and selling for future delivery, say one, two, or three months ahead, which could not be effected by buying grain on hand and taking present delivery.

First.—Buyers for consumption, millers, exporters, and foreign purchasers can, through these, convert a future unknown price into a known price, so far as is necessary to enable them to base future contracts for production thereon. Suppose a manufacturer of cotton goods or iron, feeding his own men, as indirectly he does, and obliged to estimate the rate at which he can afford to take orders according to the rate at which he can buy bread and provisions, it is plain that he could "figure" the rate at which he could take orders more closely if he could make certain his own

future rate of expenditure on his supplies of food and provisions. This he could do by buying in August, deliverable in October.

Secondly.—Precisely as buying in a wide market equalizes prices over a wide area of country and enables millions of persons to produce the same product in close competition with each other, so buying for a considerable period of time, or "going long" spreads and equalizes over a long period of time the changes in price which are made inevitable by natural causes, such as war, drought, flood, great or small harvests, and the like. Equalization of prices over time is as essential to steady production as equalization of prices over wide areas, and numerous groups of producers and consumers. If a rise of 20 cents per bushel in wheat is made necessary by an impending war between two grain-growing countries, and if one buyer knows it three months ahead, and buys his supply at an advance of two cents per bushel, he not only saves his own supply but he brings the market two points nearer where it ought to be, and thus serves millions of producers and consumers who are interested in the rise being both early and gradual, not late and spasmodic.

Thirdly.—Such "futures" originate with buyers, since if no one wished to buy ahead no one could sell futures. Each buyer pays a margin on his contract, sufficient to secure the seller against loss in event of a fall in price and no delivery. The futures run in links from the consumer back to the producer. In such cases they cause a current of advance payments to set in from the dealers in the futures or purchasers.

This is in effect a movement of money in advance from the consumers, or their representatives on the Board of Trade, to and among the producers. Farmers are thus enabled to get advances on their grain and planters on their cotton, whereby the harvesting is virtually done with the capital advanced by the consumers. This converts articles like cotton and wheat, for which prices are established by "futures" into "cash" articles, or articles on which long advances are had, whereas cotton goods, furniture, and manufactured articles are sold so invariably on long credits that even "cash" means thirty days after delivery.

42. Cornering the Market.—Conceding that the economies of the trade compel dealing in futures, let us now analyze the working of a corner. A corner in grain occurs when a merchant or a clique of merchants have bought up so many of their fellow merchants' contracts for future delivery, and at the same time have gained control of so much of the grain actually in market, that

those who have made the contracts are unable to buy at the price stipulated, when the grain is deliverable. The cornered merchants must pay, to the clique, the difference between the price named in the contract and the price current at the time set for delivery. The corner could be prevented by confining the purchase and sale of grain to that in sight, or, in other words, by prohibiting a dealer from selling, or agreeing to sell, what he has not yet purchased.

It can not always be known, until the contest is over, whether one party is trying to corner the market, or the other to break it. A purchaser may begin buying, to protect a price at which he has already bought and desires to sell. He may believe, as Mr. Keene did in 1879, that a wet season in England would send wheat up from $1.05 to $1.35. In August he buys 500,000 bushels, deliverable in October at $1.10. Having once agreed to take this quantity at this rate, he does not want the price depressed below that rate, and believes that whoever tries it will lose their money, if met with both money and courage. He therefore buys all the wheat offered for October at $1.10. He can not always distinguish between the effect of his own purchases to run up the market and the effect of English dampness. When he has bought 15,000,000 bushels he would have all the wheat the elevators in Chicago would hold, if he were buying for present delivery. But as he is buying for October delivery, the sales can be manufactured on him as often as there is a party with courage and the margin. Buying at prices ranging from $1.10 to $1.35, he has one chance of gain and two chances of loss. His two chances of loss are (1) that so much wheat deliverable in October may be poured in on him, and the certainty of English dampness not affecting the price in the degree he had expected may become so apparent, that either from loss of courage or lack of money he may be compelled before October to allow the market to break, in which case it falls to perhaps 90 cents, and he has lost the difference between the prices he paid and 90 cents. He may have this luck when he is right in his judgment, and when October comes the price may be $1.35, unless he also has the courage and the money to hold the market against the bears. (2) His second chance of loss is that, in buying to sustain his price, he may have much "cash wheat" on hand which he must sell out at a decline. His one chance of profit is that, if his judgment was correct, he will have only sent up the market in advance, to the point where the ratio of supply to demand would have compelled it sooner or

later to go, with the advantage that he will reap as profit the rise on all he has bought.

In the case of the Keene wheat deal of 1879, the result showed that he operated against the true and proper course of the market, by underestimating the capacity of the American supply and overestimating the potency of the English deficiency. By expanding the American export of wheat from 152,075,000 bushels in 1878–9 to 176,426,000 bushels in 1879–80, and our export of corn from 79,431,000 bushels to 103,450,000 bushels, with a like increase from India and elsewhere, the deficiency was filled without any serious rise in price.

In 1881 the New York legislature ordered an investigation of the causes of the extraordinary rise in prices in Chicago and cessation of shipments of wheat eastward and to Europe.

Railway managers of high repute testified that the difficulty was due to gambling in futures on the Chicago Board. The facts, when fully sifted, showed that the Board of Trade was right and wise in preventing the export of wheat necessary for our own consumption, and which, if we had sent abroad, we must have brought back at a still greater advance. The total corn crop of the United States had fallen from 1,754,861,535 bushels in 1880 to 1,194,916,000 bushels in 1881, a decline of 559,945,535 bushels, or more than five times the amount of our export in 1880. Our wheat crop in the same year had fallen from 459,479,505 bushels in 1880, according to the census, to 380,280,000 bushels in 1881, according to *Bradstreet's*. Here was a decline in production of 79,199,505 bushels in wheat, while our export of wheat in 1880 had been 159,264,214 bushels. The market was maintained in its equilibrium by sending abroad only 118,000,000 bushels in 1881, for which the American farmers received at the place of production $1.19 per bushel, whereas for the larger crop of 1880 the farmers got* only 95 cents, and for that of 1882 only $1.03. The amount saved, to the farmers, by the superior sagacity of the Board of Trade over that of their critics, was in this instance $28,320,000, or twice the sum involved in the so-called Alabama claims, the peaceful adjustment of which through the Geneva arbitration and award is justly regarded as one of the triumphs of national economy as well as of international diplomacy.

A temptation is afforded, by the system of dealing in futures in the grain market, to those who have no means of

* According to Mr. Nimmo, statistician of the Department of Agriculture, Washington, D. C.

basing their ventures on any calculations or reasons connected with supply and demand, and whose purchases and sales are made upon no principle, and with no insight into the condition of the market or the facts which should influence prices. To such persons the buying and selling of futures becomes a mode of gambling as blind and reckless as betting on cards would be. The mistake has been made, however, of making the gravamen of the evil to consist in dealing in futures, whereas the real fact which marks their dealing as gambling is not that they do not get a physical delivery of the grain they buy, but that they do not get an intellectual conception of any reasons or motives which should justify buying. To bet in the dark on the prospective changes of prices, in an article of whose supply and demand they know nothing, is mere gambling, while to buy in anticipation and intelligent forethought of causes which make the thing purchased worth more than the money paid for it is mere prudence.

43. How Prices Are Made.—Economists have used the term natural value to express the value which they think a commodity possesses by reason of the labor spent in producing it; intrinsic value, to express the permanent value a commodity has when measured in the average of other commodities, or in comparison with a sufficiently large number of commodities to comprise a standard more trustworthy than gold or silver coin or other money; and money value, or price, to express the value a commodity has in money. So far as money rises and falls, in its purchasing power, by reason of causes relating to its own volume, the price, or money value, ceases to accurately measure intrinsic value. But the disturbances in the value of money being slow, and often concealed far below the surface of things, do not appear in the ordinary markets of merchandise. In them price passes for value, as if the two were identical. What all men assume without thinking has, in certain ways, the potency of truth, even if they all think wrong. Hence prices, rather than values, become the immediate force that impels trade. Buyers seek the largest markets they can reach to get the lowest prices, and sellers seek the largest markets they can to get the highest prices. Markets thus become the manufactory of a price, on each commodity in which they deal, which rules all transactions in that commodity. The price is the index of demand, and the magnet of supply. The price, by pointing out each new direction of the demand, rules production. If the price of peas is higher, relatively to oats, farm-

ers drop oats and raise peas. If women wear Jerseys and Jerseys are made of worsted, wool-dealers express the change by a rise in worsted wools, and farmers meet the change by changing their short, fine-wooled merinoes for sheep that produce a longer wool. Thus price regulates production, and points out the changes which different articles undergo, in their relative utility, accordingly as they begin, or cease, to please the human taste. The phrase, "There can be but one price in one market," depends for its truth, on our defining the term market to mean that area over which but one price rules, at one time, or over which all minds are in direct communication. Hence wide markets imply wide equality of terms, *i. e.*, that great numbers of persons shall be enabled to buy and sell at one price. This equality is sought by all dealers and insures promptness in trading, thus saving time and chaffering. For, as soon as one who desires to buy knows he is getting his article at the lowest price obtainable, he buys. Till then he waits. The lack of a known price is a paralysis upon commerce, and through that upon production. Hence the prompt fixation of prices, the wide acceptance of their authority by producers and consumers, and prompt trading by many millions of people, is as important a time-saving, and labor-saving service, as is that performed by steam engines and railway trains. In the more remote African fairs, according to Stanley, the buyers meet to inspect and chaffer, and perhaps continue this for days before beginning to buy and sell. The most advanced and useful markets are those whose prices are most widely authoritative. In grain these are the Chicago, Liverpool and New York Boards of Trade or Produce Exchanges. In stocks and shares it is the London and New York Stock Exchanges and the Paris Bourse. The instant a price is made at either of these, buyers and sellers, all over the world, deal in accordance with it. If each dealer had to wait until he himself could learn the causes which influence demand and supply commerce would be paralyzed. Every manufactory must use power. A manufactory of prices involves a use of two powers: intelligence combined with courage, and money or credit. There are in every such price-mill two parties, one of which, the "bears," have made such contracts that they will gain if prices fall and lose if they rise. Another, the "bulls," is interested in having the market price go up. All the capital in the business divides itself between these two parties. The battle between the two contending forces is like a fight between two armies. Some are wounded in it; some are slain. But it

decides the price not merely for that spot but for millions dealing elsewhere.

In the sale of carriages, pianos, jewelry, clothing, and other things which do not admit of such an authoritative contest over the price, there is great inequality in the prices at which two persons, in the same city, on the same day, may buy two things of the same kind, and of equal value. Hence there is great cheating in such trading. One may pay $200 for a watch which another buys for $100. There is no standard. In all these grades of goods long credits must be given, as the dealers must hold the goods until they reach consumers. But in articles dealt in by produce exchanges the price is advanced to the producer, and his crop can always be sold if he desires, even before it is harvested. Hence the authoritative manufacture of prices confers somewhat the same benefit on a community as is conferred by an authoritative system of law, religion, manners, and ethics. It enables every man to know, each moment, how he stands relatively to the results of his past exertions, what they have cost, and how much he can get for them.

It is easy to exaggerate the notion that exchanges of commodities indicate equivalent values in the things exchanged. When Esau sold his birthright to Jacob for a mess of pottage, when Judas sold his Saviour to his enemies for 30 pieces of silver, and when Benedict Arnold sold his honor and his patriotism as an American for a commission in the British army, when Bacon sold his integrity as a judge—in all these cases there was an exchange, but not an equivalence of value. Men may sell what it is unprofitable for them to sell at any price, buy what would be dear if they got it gratis, and so make unprofitable exchanges as easily as unprofitable investments, employments, or experiments. The naked fact, that an exchange occurs, determines no more whether it is profitable, than the naked fact, that production occurs, determines whether the product is worth more than the cost. Yet a presumption arises in favor of a continuing stream of exchanges, or productions, that both are profitable, as a presumption arises that the point to which water flows is lower than its fountain. In this sense, price becomes a presumption of equity and economic fair dealing, as between all who sell and all who buy.

In our chapters on labor we shall endeavor to show that this principle of equitable exchange underlies the ordinary sales of labor to an employer for wages, of the use of money to a borrower for interest, of the use of land to a tenant for rent, and of

the use of capital to those who labor. In all these cases it will be found that there is an essentially equitable division, between the several concurring agents in production, of the entire earnings derived from their joint concurrence in proportion to their share in producing. In this sense every service, that is paid for, becomes a commodity to him who buys it. The price at which he buys it is the mean between two competitions, viz., the competition between all the producers of the commodity desiring to sell, and all desirers of the commodity seeking to buy. The competition between the sellers fixes the lowest price at which he may have to buy. The competition between the buyers fixes the highest price at which he can possibly sell. Where these meet is price. Price is the sum at which those holding commodities can better afford to forego the commodity, and take the money that is offered, and at which those who hold the money can better forego the money and take the commodity. The former compares the other uses he can make of both commodity and money, and believes he can make a profit by taking the money. The latter makes the same comparison, and believes the commodity is worth more to him. If all men were absolutely wise, all exchanges would be absolutely profitable. As it is, the best thing that is true of prices is that they are the highest expression at once of human liberty and social order. In no act of life does choice so largely enter, and yet in none are we so peremptorily compelled to choose. On this chain, of freely chosen acts of will, is hung the commerce of the world.

44. Errors Concerning Causes of Prices.—A common error concerning prices is that they are fixed by looking backward at cost of production; that each successive participant or purchaser has only to add his ordinary profit to what he buys to get it ; and hence the prices of exchanged goods are enhanced according to the number of the middle men through whose hands they pass. In fact, however, prices are always determined by looking forward at the possibilities of sale, not backward at the cost of production. From the consumer back to the producer, each dealer sees only the "inch before his nose" to the price he can get. He buys with reference to that price. In this way the sense of value is educated backward along the line, and the quantity unsold rises or falls, not according to its cost of production, but according to what the last purchaser paid. Profits can not be obtained by adding to price, but must be carved out of price in advance by economic bargains concerning wages, rent,

interest, cost of raw materials, and other elements of production. The effort thus to carve out profits in advance from these several sources, as well as to obtain them through cheaper processes and wider markets, has caused many employers to feel, with Ricardo, that, in practice, profits are the leavings of wages, though in theory profits are the cause of wages. The former is the superficial and practical, the latter the ultimate and philosophic view.

To get a nearer view of the mode in which price is adjusted, suppose a man is fishing from the shore with a hook and line, without either boat or net; and, thus equipped, he can catch 20 lbs. of fish a day. If he is fishing for amusement and not for profit, he does not covet boat or net. But if he desires to sell his fish, and boat or net is offered to him, he asks by how much will the boat increase his catch. He finds that thereby he can take 200 lbs. with the boat ; with the net 1,000 lbs. Now if there is only a present and near market for the 20 lbs. which he can catch with his hook and line, neither boat nor net has any value to him whatever, because of the absence of demand, which is the ultimate and first cause of all value. If there is a market for 200 lbs. and no more, then boat and net are of equal value to him. But if there is a present demand for 1,000 lbs., then the net is worth five times as much to him as the boat, and the boat ten times as much as the hook and line. Should he pay all his increased catch, however, both boat and net would still be of no value to him. How much will he pay ? If there are plenty of other boats and nets, and he alone wants them, he represents the sole demand against an ample supply. This would make his rent of the boat or net nearly gratuitous. Each owner would offer his net or boat at the highest rate he thought would be low enough to prevent his going elsewhere. If there were no other net or boats, and many other seekers, the boat would be offered to him only at a rate higher than any other seeker would pay for it. If the next seeker would pay 800 lbs. of fish, out of the 1,000 caught, then he must pay somewhere between 800 lbs. and the whole. If the motive, and the necessity, to both parties, to enter into the trade, were equal, the price would be 900 lbs. Thus in each stage of the bargaining there is an equal division, not of the entire catch, but of the difference between the share of the catch which each can obtain by dealing with the other, and the lesser share he can get by dealing with the next best outside person. The competitive price, therefore, is the final mean arrived at by splitting the difference between the highest sum any known

purchaser will pay and the lowest sum for which any known seller will sell, the seller having in view the relative advantage to him of the price rather than the commodity, and the buyer having in view the relative advantage to him of the commodity rather than the price. In this sense the term price covers the consideration for which every exchange is made, whether of money for goods, money for service, for use of land, or for use of money.

In attempting to arrive at the influence of causes of any kind upon prices, no source of fallacious reasoning leads to so many prominent errors as the mistaking of a partial, secondary or utterly impotent factor, for the one decisive and controlling factor. Thus, in many English discussions of the influence of protection upon prices, we find free use made of the inequalities in the prices, of grain in Great Britain in the period from 1810 to 1825, accompanied by the assumption that these great inequalities are obviously due to the British duties on the importation of foreign grain, and without stopping to inquire whether as great and like fluctuations did not occur at precisely the same periods in France, Germany, the United States, and all other countries from which England could have obtained her supply.*

It will be seen by the chart of average prices,† during the several years, that the average of 1817 was 96*s.*, and that the average price in 1813 had been 109*s.*, while in 1812 the average price had been 126*s.*, and in 1801 it had been 120*s.*, and the fluctuations in these prices in France and in the United States in the same years were identical with those in England.

In these discussions no mention is made of the war between the allied powers and France, under Napoleon, the latter aided in

* Thus Mongredien in his "History of the Free Trade Movement in England," p. 5, says: "This Corn Law, which was enacted in 1822, under Lord Liverpool's administration, was bad enough, since it gave the landlords a monopoly of the wheat trade up to 70 shillings per quarter, and afforded no effectual relief till the price reached 85 shillings. It was, however, rather less stringent than that which preceded it, for that totally prohibited the importation of foreign wheat until the current price in England had reached 80 shillings per quarter. That price for wheat meant something like 1*s.* 4*d* per quartern loaf.

"This earlier Corn Law had been passed in 1815, and no wonder that at the time of its being enacted popular indignation was excited to its utmost. Riotous assemblages had to be dispersed by armed force, and the House of Commons itself had to be protected by the soldiery, when the third reading of the bill was voted by a large majority. This harsh measure, which took from the nation to give to a class, soon produced its inevitable results. Two or three deficient harvests successively occurred; and the price of wheat rose to 103*s.* per quarter in December, 1816, to 104*s.* in January, and to 112*s.* 8*d.* in June, 1817.

† For chart see p. 124.

1812-15 by the United States, of the vast quantities of debts and issues of credit money incident to these wars, or of the many circumstances which were potential in sending prices of breadstuffs as high in the United States, France, and Germany as they were in England. The accompanying chart of fluctuations in price in England, America and France shows that they were as great in the latter as in the former and occurred at the same periods.

A like tendency is manifest, among writers on free trade and protection, when dwelling on the period from 1860 to 1870 in the United States, to attribute solely to protective duties, a range of prices which were more largely due to the deprivation of the cotton supply, the increased demand for woolen clothing, the increase of railway building, the expansion in the volume of the currency and the debt, and the variations in price inseparable from such causes, than to the immediate operation of tariff duties on imports.

45. Tooke on Prices.—The wars between France and the allied powers (1795 to 1815), and the twenty years following, were marked by such remarkable variations in prices, as to cause a wide and voluminous discussion of the causes of prices in pamphlets and books. The results of this discussion are embodied in Tooke's "History of Prices," which, more than any other English economic work, is marked by the inductive method, and proceeds from observation to theory.

The alleged causes of fluctuation in price, to which Tooke's investigations were chiefly directed, were (1) the wars, (2) good and bad farming seasons, as affected chiefly by the weather, and (3) the currency, as affected by increased or diminished volume of coin or paper.

Tooke concludes, after comparing prices during a long series of successive intervals of war and peace, that mere war, unaccompanied by any changes in the volume of money, does not tend to raise prices, except in the line of military supplies and naval stores, for which in peace there is hardly any demand. He concludes that as war does not increase the consumption of food or clothing, since the soldiers consume no more of either in the field than they would at home, it can only enhance prices by lessening the supply, by withdrawing the workers who produce them, and expending their force in fighting, fortifications, and other unproductive labor. He says:* "As to the supposed extra de-

"Tooke on Prices," Part ii., p. 46.

mand arising out of the war, the effective demand must be limited by the means of payment, and the stimulus or excitement arising out of a state of war cannot supply any extra means of payment except by previous course of production." We do not concur in this statement, but hold that, instead of effective demand being limited by means of payment, the means of payment will be multiplied, and especially will be made to circulate more rapidly, to adapt them to the effective demand. When Secretary Chase, in 1861, tried to get a loan of $50,000,000 from the New York bankers, and they declined to lend it, and so the government was without means of payment, this, so long as it lasted, limited the effective demand for guns and uniforms. But when he told them he would issue government notes, until, instead of borrowing money from them, they would have to run their banks on his money, this shows how the effective demand for means of payment calls them into existence as it does all other commodities. All modern wars cause a large manufacture of "means of payment," and hence supply the cause of rising prices. But, in a war in which no increase in the quantity of money of any sort occurs, the diminished production might be the chief cause tending to enhance prices. Yet it would be difficult to imagine a war in which there would be no greater rapidity in the movements of money than in peace; and, of course, if a given volume of money circulated so rapidly as to be the means of making more payments than before, this increase in rapidity of circulation would have the same effect on prices as an increase in its volume or quantity.

Tooke repudiates, so explicitly, the notion that cost of production regulates price ; that it is remarkable that economists should have disregarded his position. He says,* "that the cost of production can not be considered in the case of corn, and indeed of most other kinds of raw produce, as a cause determining actual or immediate market prices ; that the cost of production in nearly all cases relating to the grain produce of this country, and still more as regards the produce of other countries, is an unknown or unascertained quantity ; and the only mode in which it can be considered operative on prices is when, as a result of a course of years, market prices are found to be unremunerative to those growers, at home and abroad, who, in point of soil, climate, and situation, are least favorably situated ; under such

* "History of Prices," vol. v., p. 227.

circumstances, the cultivation, so far as those are concerned, will be discontinued. So, on the other hand, if prices for some length of time be more than ordinarily remunerative, there will be an extension of the area of cultivation, and, according to the degree or proportion in which these causes of diminished or extended cultivation may be supposed to operate on the total of the sources of supply, will be the greater or less influence on the ultimate range of prices."

In short, cost of production only affects prices when it becomes so high, relatively to the price which demand creates, as to cause those sources of production, which can not afford to produce at that price, to stop producing altogether, thus diminishing the supply. But in this case it is not the cessation of production that affects the price, but it is the price that causes the cessation of production.

46. Prices Rise in Disproportion to Scarcity.—Tooke confirmed by actual facts the theory of Gregory King that a decided deficiency of supply, especially in the case of breadstuffs (corn), is attended with an advance in price very much greater than the degree of the deficiency. The effect of this is to make the years in which the smallest agricultural crops are produced the most profitable to the agriculturist, and they bring him the largest returns, thereby supplying him with a profit on his capital which stimulates him to the largest possible production the next year, and so tends to bring on those years of abundance which bring relief to the food consumers, but debt and distress to the farmers. King had stated the ratio of increase of price to scarcity of crop as follows :

		Above the common rate
A defect of 1 tenth,	raises the price	3 tenths
2 tenths		8 "
3 "		1.6 "
4 "		2.8 "
5 "		4.5 "

So that a deficit of one-third would treble the common price, and a deficit of one-half would raise it five-fold.

The very singular result which this rule, if true, would involve, is thus stated by Mr. Tooke* : "If the advance in price, from deficiency, increase the aggregate value of the smaller quantity, in some instances, to double or more than double the amount in

* "Thoughts on Prices," p. 99.

money which the larger or average quantity would have produced, the fall in price from abundance may reduce the value in money of the larger, or more than average quantity, to a sum considerably less than the smaller would have produced. Thus, suppose that, with bad or scanty crops, the produce of all sorts of corn were 28,000,000 of quarters, which, one kind with another, fetched 60*s.* per quarter, or £84,000,000 ; and that, upon the full restoration of the ordinary produce, or 32,000,000 quarters, the price fell to the average rate of 40*s.*, the 32,000,000 of quarters would be worth only £64,000,000, or less by £20,000,000 than the smaller quantity had been worth. In the same case, by the same sort of interior arithmetic by which the £20,000,000 additional, paid by the consumers to the producers of corn, had been considered as the creation of so much wealth, the mere cessation of that payment, by the restoration of an average quantity of produce, would be considered as the destruction of so much national capital."

This notion that scarcity of production might be an increase of capital, and abundance of production might work a diminution of wealth, would seem frightful to Bastiat, and to all who hold that glut can not be poverty, and scarcity can not profit the consumer.

But Mr. Tooke applied the test to several periods. He found that in 1799, the deficiency as stated from the best data, in a Report of Committee to the House of Commons, was less than one-fourth as to wheat, and still less as to other grains, the average crop being 8,000,000 quarters. Yet the actual rise in price of produce by the deficiency was from 50*s.* 3*d.* to 104*s.* 4*d.* average for the whole crop.

8,000,000 of quarters at	50*s.* 3*d.* - - -	£20,100,000
6,000,000 " "	104*s.* 4*d.* - - -	31,300,000

Here was a gross profit to the farmers of £11,000,000, by reason of being deficient 2,000,000 quarters on their wheat crop alone. But as the other food crops are double the value usually of the wheat crop, but were affected by a like rise in price, Mr. Tooke estimated the gross profit to the farmers on all at £33,000,000. One mark of an extension of cultivation, at this period, was an increase in the number of inclosure bills or acts of Parliament for inclosing land previously common. These bills rose from 63 in 1799 to 122 in 1801.

In 1617, with an average crop, the price had been 43*s.* 3*d.* (aver-

age). But in 1620-'21 abundant crops caused the price to fall to 27*s*. As the result, Mr. Tooke shows, the whole crop went off at such a sacrifice that the farmers were generally unable to pay any rents at all, and the greatest suffering and distress prevailed throughout the farming populations.

Mr. Tooke finds that the enormous prices which attended England's contest with Napoleon, and made the farmers rich, were not due so much to the wars, or even to the inflation which attended them, as to the bad seasons. "In 20 years, from 1793 to 1812, included, there were 11 years of greater or less deficiency of produce, with long and severe winters."

Similar facts were shown by Henry C. Carey concerning our cotton crop, and Henry Carey Baird has pointed out that the short grain crop of 1881 brought to the farmers of the United States $25,000,000 more than it could have brought had it not been 700,000,000 bushels less than the average crop.

47. Permanent and Temporary Cheapness. — Cheapness in the sources of supply is more important, to every purchaser or purchasing country, than cheapness in the actual supply at any moment. The tendency of agricultural prices, in bad years, to rise to a point which would make the short crop more profitable than the average crop, and so furnish the farmers with a larger capital, and better inducement to plant largely the next year, acted as a stimulus to English, Irish, and Scotch farming, until the repeal of the corn laws withdrew protection against foreign competition from the British farmers in 1846 to 1849. Short crops would be followed by such increased planting, and dear meats by such increased cattle rearing, that, though the population never increased in so rapid a ratio, in the three kingdoms, as from 1780 to 1846, the farmers kept even pace with the consumers. There was no impairment of the permanent sources of supply. It was expressly to prevent this remuneration of the farmers in bad seasons, through a rise in the price of corn, that the duties on corn were repealed. They so attained the desired result that, after 1846, bad seasons to the farmers have not been attended by compensating prices.*

---

* Thus Broderick ("English Land and English Landlords," p. 273) says: "The agricultural distress of the year 1879-'80 will long be memorable in the economical records of the country, and may probably be remembered as marking a crisis in the history of the English land system. Its most obvious and principal cause was the occurrence of several bad seasons in succession, culminating in the coldest, wettest and least genial spring and summer that had been known within living memory. But this

On the contrary, each succession of bad seasons has effected a permanent displacement of British in favor of foreign farmers, as the ordinary sources of supply to the British people. The aggregate value of farm products, not including groceries, liquors and luxuries for the table, imported in Great Britain, quadrupled in 20 years, rising from £24,359,598 in 1859, to £95,996,249 in 1878, while the value per head of population had more than trebled, rising from 17*s.* to £2 16*s.* 10*d.* This, of course, implies that British cultivators are not only receding from furnishing a part of the supplies which they formerly furnished, but that they are furnishing a smaller aggregate value. The experiment of free importation of breadstuffs in Great Britain, therefore, is that of getting an immediately cheaper supply of corn, by demolishing their domestic sources of supply.

The actual cheapening in the price of breadstuffs in consequence of the repeal was both so transient in duration and so small in amount as utterly to falsify the predictions on which the measure was passed.* It is possible, indeed, by selecting peculiar periods, before and after the repeal, to seem to show that the repeal lowered the price by a third, or did not lower it at all, but raised

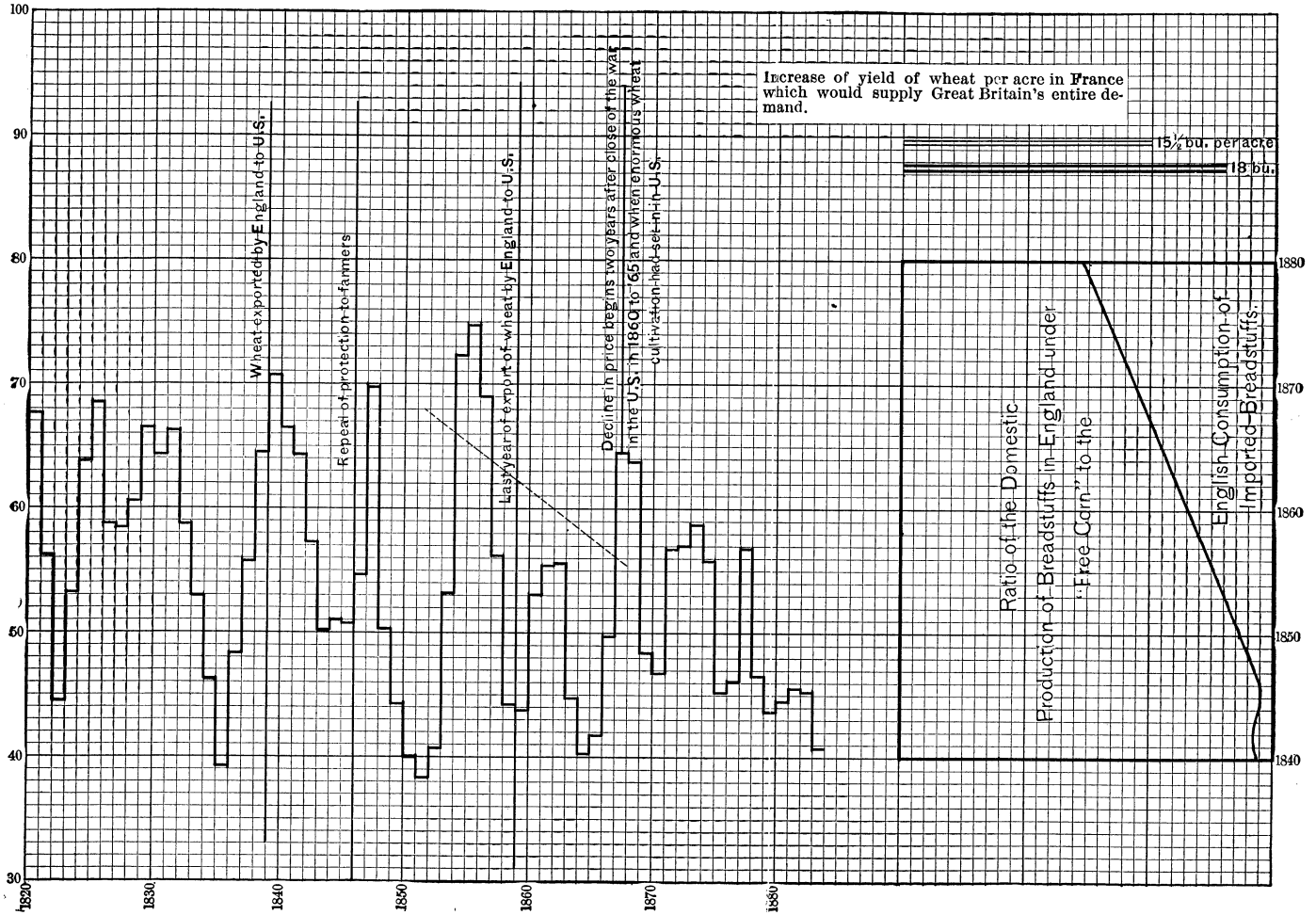
---

calamity was greatly aggravated as regards the interest of farmers, though mitigated as regards those of the public, by a singularly low range of agricultural prices, as well as by a general sense of insecurity due to a vast expansion of foreign competition.

**Broderick*, in "English Land and English Landlords," p. 292, says: "When the Corn Laws were repealed, it was never anticipated that agricultural prices could rise to their present level, and many rents were fixed upon the assumption that wheat in future would command an average price of 40*s.* per quarter; barley, 30*s.*; oats, 20*s.*; wool, 1*s.* per pound; and butter, 10*d.* or 1*s.* per pound, no account being taken of milk, for which the demand was then infinitely less than it now is."

Shadwell, in "System of Pol. Econ.," p. 499, says: "When the Corn Laws were repealed, the farmers did not cease to obtain remunerative prices for their produce, though they did to some extent abandon corn-growing in favor of pasture. This change was carried out to so large an extent in Ireland as to produce most serious consequences, and free trade may be justly charged with the great depopulation of that island which has taken place during the last thirty years. The Corn Laws placed so great an impediment in the way of the importation of foreign corn that they held out a great inducement to grow it in every part of the United Kingdom; and Ireland, which is better fitted for a pastoral country, was by their operation converted into an agricultural one. Agriculture requires that a much larger number of laborers should reside upon the land than is necessary in pastoral industry, and thus the effect of the Corn Laws was to cause that remarkable increase in the population of Ireland which continued as long as they were in force. When they were repealed, agriculture in its turn gave way to pasture, and the population of Ireland rapidly diminished. The potato blight and its consequent famine were the occasion of the commencement of the depopulation, but such a temporary disaster can not have been the cause of what continued long after the occasion had passed away. If, then, depopulation is to be considered an evil, free trade has certainly inflicted an evil on Ireland; but it must be re-

AVERAGE PRICES OF WHEAT IN ENGLAND, IN SHILLINGS, PER QUARTER (OF 8 BUSHELS), BEFORE AND AFTER THE REPEAL OF PROTECTIVE DUTIES ON CORN IN 1846-9.



..... The dotted line marks the decline of acreage in cultivation of wheat in Great Britain, as estimated by McCulloch and Caird, between 1852 and 1868, at 100,000 acres per section line, viz., from 3,750,000 acres in 1852, to 2,453,000 acres in 1868, being 1,297,000 acres of net decline in 16 years, or 81,063 acres per year.
The area from which the cultivation of breadstuffs receded in each of the 16 years, from 1852 to 1868, exceeded in acreage the estates of either of the landholders of Great Britain except four, and about equalled the entire acreage owned by the Duke of Bedford.

it slightly. Thus if one average be struck for the 48 years from 1800 to 1848, the ante-repeal price is inflated by the high prices incident to the wars with Napoleon from 1800 to 1815, the average being 70*s.* 3*d.* per quarter, as against 51*s.* 10*d.* for the 30 years from 1849 to 1879. Yet there was but one year between 1819 and 1846, viz., 1839, when corn rose to this supposed average, whereas after 1846 its average rose above 70*s.* in 1854 and 1855, and stood at 69*s.* 2*d.* in 1856, thus presenting three successive years, in the first decade of free importation, in which the average price rose above the price it had maintained in any year (but one) of the seventeen years preceding repeal. The average price, however, for the eleven years 1837 to 1847, both inclusive, was 51*s.* 5*d.*, while that for the eleven years 1847 to 1857, inclusive, was 47*s.* 3*d.* But if the five years preceding the repeal be compared with the eleven years following, the result will indicate an actual rise in prices. The average for the five years preceding 1846 was 54*s.* 11 2-5*d.* In 1846 it was 54*s.* 8*d.*, and for the eleven years following 1846 it was 55*s.* 5 1-4*d.*, or 8*d.* higher for the eleven years after the repeal than for the five years before it. In 1847 the average price was 69*s.* 9*d.*, in 1848 it was 50*s.* 6*d.*, in 1849 it was 44*s.* 3*d.*, in 1850 it was 40*s.* 3*d.*, and in 1851, at 38*s.* 4*d.*, five years after the repeal, it touched for the first time a lower point than it had reached in 1835 (39*s.* 4*d.*), eleven years before the repeal. These facts clearly show that the repeal was an extremely secondary influence in reducing the price, if it can be conceded to have reduced it at all. It does not compare as an influence with a good season or an increased acreage.

Owing to the fact that statistics of acreage planted were not kept by the government until 1862, the decline in acreage of cultivation must be partly matter of estimate. If it should appear that the land from which cultivation of breadstuffs receded, or to which it failed to extend with growth of population, would, if it had continued to be cultivated to those crops, have produced a quantity equal to the increased quantity of breadstuffs imported,*

---

membered that but for protection the population of the country would never have increased to such a height as it did, and that if free trade had always been in operation no diminution would have taken place. The increase in the numbers of the people was no great benefit to them, for, as is well known, the greater part of them were in a state of chronic and abject poverty. The diminution of the population of Ireland has been accompanied by a larger increase in that of England and Scotland, so that the effect of free trade has been to attract people to the districts where they could live in greatest comfort.

* The article on Corn Trade in the 9th edition of "Encyclopedia Britannica," quoting from Mr. McCulloch's article in its 8th edition, presents the facts in a manner which,

and in addition that the average price since the repeal has not really been lower than it would have been had cultivation continued on these lands by reason of continued protection to the farmer, it would follow that the British people had transferred their source of supply to foreign countries without cheapening their supply. It may be fairly contended to be a principle concerning prices that when cheapness, in the supply of the product, is temporarily obtained by means which extinguish, or make very much dearer or more precarious, the permanent means of producing that same product the temporary cheapness will prove to be an ultimate dearness.

---

though not intended to concede that the repeal was a failure, does still show that enough land was withdrawn from cultivation to have produced the quantity of wheat imported, Rearranging the statements in our own form they contain the following facts: In the twenty years following the repeal of the corn laws, the production of wheat in Ireland and Scotland fell off one-half. As the acreage in Ireland in 1853, seven years after the repeal, was still, as stated by McCulloch, 400,000 acres, the falling off of one-half in Ireland was of at least 500,000 acres. And as Scotland is set down by McCulloch as having fallen off one-half, but as having still 350,000 acres in wheat in 1852-3, the Scotch falling off was 350,000 acres. England, says McCulloch, diminished in wheat 280,000 acres, in oats 450,000, in beans and peas 320,000. Ireland diminished also in barley and oats one-sixth. Without counting the decline in production in oats, beans, and peas, except in England, though such a decline occurred in both Scotland and Ireland, here is a total decline in the acreage planted to wheat and its equivalents of 1,900,000 acres. This is one-half as much as the total area planted to wheat alone in Great Britain in 1874, and is one-sixth the total area planted to grain of all kinds in Great Britain in 1881. Thirty bushels per acre is a low average estimate on cereals for Great Britain. Hence this decline in acreage represents a diminution in annual food supply of at least 57,000,000 bushels, whereas the average annual importation from the years 1849 to 1859 was 80,000,000 bushels. Now, if we add to the diminution in the food supply by decline of cultivation, namely, 57,000,000 bushels, the average importation of wheat, barley, oats, and flour anterior to 1846, which is given by the "Encyclopedia Britannica" at 28,000,000 bushels, the total is 81,000,000 bushels, thus showing that the consumers of breadstuffs got essentially the same supply after as before the repeal of the duty on corn, the increase in the importation being exactly equal to the decline in the domestic production.

Hyndman, "Historical Basis of Socialism," p. 388, quotes "Sir James Caird, Sir John Lawes, Lord Leicester, Mr. Boyd Kinnear, and other skilled agriculturists as estimating that at least twice the quantity of food could be profitably grown in England to-day that is now grown." On p. 328 he says: "Moreover, during the last few years, the farmers themselves have been, in many cases, paying away their capital in rent, taxes, tithe, interest, and insurances, whilst the soil has deteriorated, and the amount of live-stock has decreased. The actual diminution of wealth has been most serious. Between 1872 and 1882 the acreage sown with wheat, barley, oats, and potatoes in England, Wales, and Scotland, fell from 9,183,600 to 8,402,000 acres; between 1874 and 1882 the number of cattle decreased by 320,000 head, and the number of sheep dwindled from 30,300,000 to 24,300,000, a reduction of one-fifth, or 6,000,000. This means unmistakeable impoverishment of the agricultural interest. At the very time, in fact, when more and more labor should be employed to make up for the injury caused by bad seasons, the farmers are nearly bankrupt."

48. Relation of Prices to Freedom.—One of Mr. Carey's "general truths" is that prices of raw materials and of finished products approach each other in proportion to the diversification of industries, the abundance with which money circulates, the activity of the societary movement, and the growth of human freedom. They certainly meet at the factory where the raw materials are converted into the manufactured goods, and where the only difference between them is the cost and profits of manufacture. The measure of man's growth in freedom, however, can be arrived at more nearly by inquiring the price of his time per day or per year than the condition of prices as to the commodity he produces. A farmer in Dakota may be producing the raw material, wheat, at a cost of 12 cents per bushel and selling it at the low rate of 60 cents. But if he is producing it in such quantity that the difference of 48 cents per bushel, between his cost of production and his selling price, applies to 1,000,000 bushels a year, then his time for the year is worth to him $480,000, notwithstanding he is producing a "raw material," and at a very great distance from the point of its consumption. His growth in freedom seems to be solely proportionate to the value of his time, or his rate of earnings for the year, and not at all proportionate to whether he is near or distant from the point where prices of raw materials and of finished products approximate.

Nor can it be truly said that society attains to a higher average condition of freedom, at the point where wool is converted into cloth, than it does at the point where grass is converted into wool. If human freedom can be said to stand connected with any condition of prices, it must be solely with the price of the time of the person whose freedom is to be estimated. To those localities where the diversity of industries is greatest, will often flock the greater number of those who are so badly equipped for the race of life that they would soon perish absolutely in Patagonia or on Selkirk's Island, but who get on after their fashion in a great city, because industries are there so diversified that occupation adapted to the least competent is everywhere within reach. It is difficult to conceive an intellect so deficient that it could not sweep a sidewalk, or strength so feeble that it could not keep an apple stand, a child so dull that it could not sell a newspaper, or a pauper so old, or blind, or feeble, that he could not beg. People, therefore, who could not support themselves a week in the rural districts, flock to the cities as presenting the freest field of struggle for the feeble. In this way cities are often charged with

producing the misery they only shelter; the vast inequalities of fortune, which prevail in cities, are set down as due to the fact that those, who have never had any productive power adequate to their maintenance, have been in some way despoiled of the good living they are assumed to be entitled to, by those whose fortunes are in excess of their means of consumption, or even of adequate consideration. It is, however, because of this very overflow of surplus wealth, that the incompetent and unproductive find it easier to survive in the vicinity of the very rich, than to endure anywhere else.*

Hence the scene of greatest diversity of industries, and most rapid circulation of money, is at once that in which industrial freedom rises highest, and yet in which the pecuniarily helpless swarm in greatest numbers, not because they are here reduced by competition to poverty, but because they are here enabled to survive longest on the smallest endowment of productive energy.

49. Countries of Low and High Prices.—Prices of commodities generally, and especially of labor, seem to descend at each stage as we pass from the silver and gold producing centers, viz., North and South America, and Australia, through the countries which have usually made most use of specie, viz., England, France, and Germany, towards those oriental countries, China and India, where labor is very largely in surplus, and silver, especially, is hardly produced at all, but is finally absorbed. It would seem as though the precious metals gain in purchasing power as they recede from the point of their production, until, amidst the reputed six hundred millions of people dwelling in India, China, Siam, and Japan, their average purchasing power as applied to land, labor, and commodities which do not admit of export, reaches its maximum. This apparent difference of prices is aided by two other causes. The lower relative use of machine power in Asiatic countries renders the actual product of labor less there than in Western peoples when the same degree of effort is put forth; and the simpler, less animal, and less nerve-stimulating diet of Eastern races, together with their inert and supine characters, renders them indisposed to put forth an equivalent effort in industry for purposes of accumulation after the present wants of the body are satisfied.

* In Yorkshire it is said that woolen rags to the amount of $260,000,000 a year are manufactured into useful articles. (*Tooke*, "Wool Production," 196.) In Paris 4,000 persons make a living from what they pick up in the streets. Roscher, "Pol. Econ.," vol. ii, p. 220.

Of these concurring reasons, the Western superiority in machinery has only existed for a century, in any marked degree, while the drain of silver to the East is an affair of many centuries. It must be admitted also that both Chinese and Hindoos display every required degree of industry, thrift, and endurance, when subjected to the inducements of high wages and better modes of living, in the United States and Europe.

It may be doubted, therefore, whether there is any other permanent cause for difference in prices in the Western and Eastern world, than the fact that the point of chief production of the money metals is in the two Americas, the point of their chief utilization is in the banks and exchanges of Europe, and from these they percolate but slowly and feebly into the avenues of Asiatic commerce, owing to the slowness of Oriental peoples in adopting the machinery and productive methods of Western civilization.

Whatever may be the reasons, the descending value of a day of average labor time, as we recede from the points of gold and silver production to those of their final absorption, may be stated with sufficient accuracy, as follows :

United States : California, $3 ; Colorado, $2 ; Illinois, $1.75 ; New York, $1.50 ; Massachusetts, $1.25. England, $1; Belgium, 90 cents ; France, 80 cents ; Germany, 70 cents ; Austria, 60 cents ; Spain, 60 cents ; Italy, 50 cents ; Scandinavia, 40 to 30 cents ; Russia, 20 cents ; Turkey, 20 cents ; Egypt, 15 cents ; Arabia, 12 cents ; India, 10 to 5 cents ; Japan, 8 cents; China, 5 cents.

A scale of descent, in the value of labor-time, of this nature, indicates that, as to labor, every geographical area from which, for any reason of immobility, whether it be poverty, patriotism, or sluggishness, laborers refuse to migrate, in order to seek a higher price elsewhere, becomes to that extent an independent market for labor, with a tendency to impart its own scale of prices to the products of labor, or rather to cease producing all those products whose prices cease to be remunerative.

In so far, therefore, as any other country, through its greater command of capital or machinery, or low-priced human labor, or enslaved human labor, can produce a particular commodity at a money cost lower than it can be produced for in a country whose people can neither migrate nor adopt the cheaper methods of production, it is plain that the latter must exclude the cheaper product or see their own capacity to produce it destroyed by the

foreign competition. Whenever low prices, obtained by importation, involve the destruction of a domestic production, which both countries have equal natural facilities for producing, the first interest of the importing country is to encourage the application, by its own people, of the artificial facilities to which the rival country owes its temporary superiority, and consequent lower prices.

These may consist of inventions, machinery, discoveries, capital, skill, low rates of interest, low rates of wages or the like. All of these any country can more wisely adopt than the low rates of wages, since a descent in rates of wages involves a degradation in the standard of living, which may react on the productivity of the labor itself, by making it less efficient, and may involve an inhumanity from which the conscience of society would revolt.

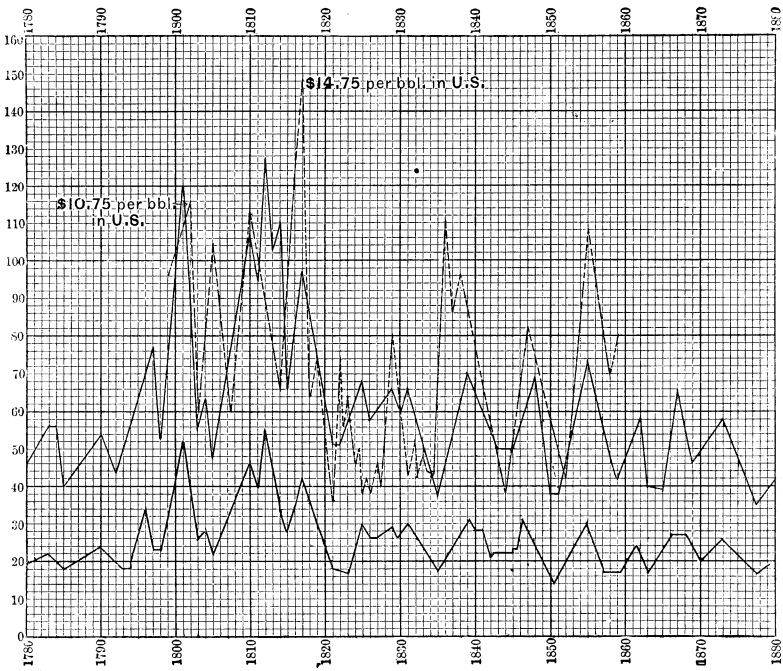


CHART OF PRICES OF WHEAT. (See p. 112 and note.)

Upper black line—Price of Wheat in England from 1780 to 1880, in shillings, per quarter.

Lower black line—Price of Wheat in France from 1780 to 1880, in francs, per hectolitre.

Black dotted line—Price of Flour in United States from 1798 to 1860, in dimes, per barrel.

CHAPTER IV.

TITLE AND USE.

50. Title and Labor.—Title to property is vaguely associated, in many economic and in all socialistic arguments, with labor expended in producing it. It is contended that land can not justly be the subject of private ownership because it is not created by labor, or because its value is not due to the person possessing or occupying* it. The value of land is due to the aggregate societary movement which brings it into demand. It is shown by that competition among purchasers for its title, and among tenants for its occupancy, which causes it to command a purchase price at the hands of the former or a rental at those of

---

**Henry George* ("Progress and Poverty," Lovell's Edition, p. 240) says: "As a man belongs to himself, so his labor when put in concrete form belongs to him.

"And for this reason, that which a man makes or produces is his own, as against all the world—to enjoy or to use, to destroy, to exchange, or to give. No one else can rightfully claim it, and his exclusive right to it involves no wrong to any one else. Thus there is to every thing produced by human exertion a clear and indisputable title to exclusive possession and enjoyment, which is perfectly consistent with justice, as it descends from the original producer, in whom it vested by natural law. The pen with which I am writing is justly mine. No other human being can rightfully lay claim to it, for in me is the title of the man who produced it. It has become mine, because transferred to me by the stationer, to whom it was transferred by the importer, who obtained the exclusive right to it by transfer from the manufacturer, in whom, by the same process of purchase, vested the right of those who dug the material from the ground and shaped it into a pen. Thus, my exclusive right of ownership in the pen springs from the natural right of the individual to the use of his own faculties.

"Now, this is not only the original source from which all ideas of exclusive ownership arise—as is evident from the natural tendency of the mind to revert to it when the idea of exclusive ownership is questioned, and the manner in which social relations develop—but it is necessarily the only source."

Mr. George here traces back his title to the steel pen with which he writes to "those who dug the material (iron ore) from the ground and shaped it into a pen," as if this were evidence that labor originated title. But it proves nothing of the kind. Those who dug the ore from the ground and shaped it into a pen may never have owned the ground, the ore, or the pen. They may have been hired servants who sold the muscular effort with which they dug the material from the ground and shaped it into the pen, in which case all they ever owned was their muscular effort, labor-time, and the wages they received in exchange for them. Their labor, as first performed, became a part

the latter. Causes of the values of land are thus reduced to the one cause, viz.: Demand, which is also the cause of the value of labor itself, of skill, of time, and of all forms of personal property.

---

of the materials and of the pen, and belonged in that form to their employer. But if the first diggers of the ore owned the ore when dug, they did not own it by virtue of the act of digging it, for they would not have been allowed to dig it unless they had first owned it. As well might a horse-thief claim that the act of carrying off the horse of another gave title to the horse, as an ore-digger could assert that digging ore made it his. The title to the ore like the title to any crop, depended on title to the land. Thus Mr. George's title to his pen becomes, when traced back, the identical title to the land which he uses his pen to attack. Again he says, *ibid.* (p. 257):

"The truth is, and from this truth there can be no escape, that there is and can be no just title to an exclusive possession of the soil, and that private property in land is a bold, bare, enormous wrong, like that of chattel slavery.

"The majority of men in civilized communities do not recognize this, simply because the majority of men do not think. With them whatever is is right, until its wrongfulness has been frequently pointed out; and in general they are ready to crucify whoever first attempts this.

"But it is impossible for any one to study political economy, even as at present taught, or to think at all upon the production and distribution of wealth, without seeing that property in land differs essentially from property in things of human production, and that it has no warrant in abstract justice."

Mr. George's uncourteous, and in the most exact sense, uncivilized remark, that the reason that the majority of men think private title to land to be just is that they do not think at all, seems to be an evidence, so far as it goes, that one can not become an admirer of the methods of savages without unconsciously adopting their manners. The study of political economy has, we think, never produced the impression upon any mind that Mr. George says it must produce upon all. We doubt if Mr. George himself did not first embrace this theory and then study political economy, after his fashion of studying it, in order to find matter in proof. On p. 227 (Lovell's Edition) he says:

"So true it is that, to whomsoever the soil at any time belongs, to him belongs the fruits of 'it.'"

As all other things are immediately or ultimately "fruits of the soil," and as, according to Mr. George, the title to the fruits, *i. e.*, to all other things, follows and is determined by title to the soil, necessarily, if no one can justly have title to the soil, he can not justly have private title to any thing. All things must be owned in common. But where all things are held in common there can be (1) no commerce or exchange, as these consist in giving that which is one's own for that which is another's; (2) no generosity, for all generosity consists in giving that which is one's own to another; (3) no rewards, for all rewards consist in obtaining from another for merit that which was his; (4) no ambition, for all ambition consists in the desire to increase the stock of one's own; (5) no production of wealth, for all production of wealth consists in bringing into being a surplus beyond our own needs for exchange, and perfect communism puts an end to exchange; (6) no industry, for no man is industrious where industry can bring no increase of comfort; (7) no comfortable living, for comfortable living can not be secured for the great mass of the world's population, without incessant industry on the part of nearly all of them, and hence to abolish private titles to land involves an intense degree of want and suffering such as would render life an unmitigated calamity to every creature.

Most of the uses of property can not be had or known at all except as they are private and exclusive, utterly unshared by any other. To till land is a use of this kind. The only absolutely communal use that can be made of land is to hunt over it as the Indians did. Even tribal ownership of land is inconsistent with Mr. George's theory that

Demand being the cause of value, all things are produced, *i.e.*, brought forward, because they are foreseen to possess value. Nothing is demanded merely because it has been produced. But

---

because man did not create or produce land therefore he can not own it. For the tribe came no nearer to creating land than the individual. Where, then, did one tribe get a greater right to exclude another than one individual has to exclude another? Nor, since the state did not produce the land, can the state own it. It simply can not be owned at all. And since, except as we own the land on which things are produced we can not own the things produced, it follows that neither the individual, the tribe, nor the state, can own any thing. Mr. George's doctrine therefore lands us in that of Prudhon, that "all property is robbery." Mr. George doubtless thinks that he thinks, but the present writer can only acquit Mr. George of being destitute of the thinking faculty in the degree essential to a rational creature, by assuming that in the above extracts, and indeed throughout his work, he has been impelled by an impulse of intensely active and burning thoughtlessness. Mr. George's remedy is as follows:

"What I, therefore, propose, as the simple yet sovereign remedy, which will raise wages, (1) increase the earnings of capital, (2) extirpate pauperism, (3) abolish poverty, (4) give rumunerative (5) employment (6) to whoever wishes it, (7) afford free (8) scope (9) to human powers, lessen crime, (10) elevate morals, (11) and taste, (12) and intelligence, (13) purify government, (14) and carry civilization (15) to yet nobler (16) heights, is—*to appropriate rent by taxation.*

"In this way, the state may become (17) the universal landlord without (18) calling herself so, and without (19) assuming a single new function. In form, the ownership of land would remain just as now (20). No owner of land need be dispossessed, (21) and no restriction need be placed (22) upon the amount of land any one could hold. For, rent being taken by the state in taxes, (23) land, no matter in whose name it stood, (24) or in what parcels it was held, (25) would be really (26) common property, and every member of the community(27)would participate in the advantages of its ownership"(28).

Here are twenty-eight distinct prophecies in thirteen lines, to entertain any one of which requires, not a more profound faculty of thinking than that possessed by a majority of mankind, but only a more superb egotism, combined with the eccentric retrogression which enables a man brought up in civilization to prefer barbarism.

Two thousand years ago Aristotle (Politics, Book ii., ch. v.) said concerning this system: "This system of polity does indeed recommend itself by its good appearance and specious pretenses to humanity; and the man who hears it proposed will receive it gladly, concluding that there will be a wonderful bond of friendship between all its members, particularly when any one censures the evils which are now to be found in society, as arising from property not being in common; as for example the disputes which now happen between man and man, upon their contracts with each other, the judgments passed to punish perjury, and the flattering of the rich; none of which arise from properties being private, but from the corruption of mankind. For we see those who live in one community and have all things in common, disputing with each other oftener than those who have property separate; but we observe fewer instances of strife, because of the very small number of those who have property in common, compared with those where it is appropriated. It is also but right to mention not only the evils from which they who share property in common will be preserved, but also the advantages which they will lose; for, viewed as a whole, this manner of life will be found impracticable."

The singular fact in Henry George's mental obliquity is that he admits all the historical facts essential to justify private property in land, if he formed his opinion on a basis of historical evidence, and then denies its justice on the high metaphysical basis that its injustice has been directly revealed to him from God. For, that a policy promotes the freedom of man is to an economist its most complete vindication. Yet on p. 275 the

before a thing can be produced, in the literal and economic meaning of that word, *i. e.*, brought or led forward, it must first be owned, and only one who owns it can lawfully produce it or lead it forward. Instead of labor being the source of title, *i. e.*, instead of its being true that a man only comes to own things by having first produced them, it is true that a man only labors productively with and upon things that he has previously appropriated and made his own, either by seizure, gift, finding, purchase, descent, contract, bequest, or some other mode of acquiring title.

51. Title Dates from Seizure or Appropriation.—That the act of appropriation, by which a thing becomes property, must precede any productive labor upon it, becomes evident both by *a priori* reflection upon the motives which ordinarily govern human action, and by an observation of the mode in which legal rights to property come to exist. In no race or condition of society has the mind of man entertained the idea that the property of B could become the property of A merely by the voluntary act of A in working upon it knowing it to belong to B. Societies have,

---

only revelator who has yet re-enforced economic science by super-mundane wisdom, says:

"The reason, I take it, that with the extension of the idea of personal freedom has gone on an extension of the idea of private property in land, is that," &c., &c. His supposed reason is immaterial. The fact, as he admits, is that private property in land and human freedom have increased together.

Again, on the same page he says: "Thus with the extension of personal liberty, went on an extension of individual proprietorship in land." He might have added that one of the chief forms of personal liberty consists in the liberty of a person to own land, to have a home, which he can call his own, not merely as a fiction by paying rent to the State, but which he can transmit to his children free of rent. Deprived of the liberty to own land no man could be said to have any personal liberty. He would be the slave of his tribe, without a home, a wanderer and a nomad. Having admitted that personal liberty grows with ownership of land, which is all the warrant one uninspired would want to justify private title, Mr. George then assumes the altitudinous attitude of a revelator:

"The laws of nature are the decrees of the Creator. There is written in them no recognition of any right save that of labor; and in them is written broadly and clearly the equal right of all men to the use and enjoyment of nature; to apply to her by their exertions, and to receive and possess her reward. Hence, as nature gives only to labor, the exertion of labor in production is the only title to exclusive possession."

To so much of this utterance as purports to make known that the Creator has issued a decree to the effect "Thou shalt not own land," the majority of mankind will listen with profound reverence as soon as they shall be satisfied that Henry George has heard from the Creator since they have. To so much as states as an economic doctrine that labor is the only, or is any source of title, they will ask what he means by labor. If by labor he means labor performed, then, since all labor performed is capital, and capital will always buy land, it is true that labor in this sense deserves land and always gets it. But labor unperformed—to buy land with that is the rub indeed!

when and where land was owned communally, provided that the neglect of the occupant to till, improve, fence, occupy, irrigate, or mine it, should be deemed by the law to be an abandonment, by the occupant, of his possessory title. In that case, the new appropriator would be justified in regarding it as unappropriated land, and could enter in and work the land. In this case, as in that of the previous possessor, his new title would begin in the act of appropriation or seizure. Even his title to the crops and products, produced by him on the land, would either depend on the validity of his act of appropriation, or upon some rule of law whereby his good faith concerning the land, *i. e.*, his belief that he had the right to appropriate it, was made a ground for giving him title to the crops produced by him while in possession. In no case, we repeat,* was an intentional and confessed trespasser permitted to acquire title by his trespass, whatever might be the value of the labor he had blended with the article during its intentionally wrongful possession by him.

Nor is it in the nature of any man, in any race, to hope to gain title to a thing he does not own, by working upon it, unless it lies open to appropriation. In this case he first appropriates it, afterwards works upon it, and then bases his title on his act of appropriation and not on his labor. The phrases of the early Roman law show definitely that title in all cases arose in appropriation. All dominion or title, whether to wife, children, slaves, cattle, or land, was called *manus*—hand power, or the grip, grasp, or grapple by which the owner held them. The act of acquisition by which his title vested was *mancipium* or the "giving them into his hand," a word which included the idea of capture. The common form of closing hands in ratifying a trade is believed to be a survival of the old grapple or wrestle in which the victor carried off his booty as prize. Our modern purchaser thus succeeds the ancient victor, and our modern vendor takes the place of the vanquished. The early English word *seizin*, meaning the occupancy of land under a claim of title, as distinguished from mere possession, discloses and incloses the fact that all titles began in an ancient *seizure*, or act of appropriation of title, which a modern seizure could not aspire to be or undo. The title having once been appropriated by seizure could not be the subject of a second appropriation, but all subsequent acts of acquisition must be by transfer from the original appropriator.†

---

* Vide Ante.

†The chief function of laws and courts is to protect titles. It is natural that jurists

52. Private Title Is Monopoly.—In the infancy of society titles were at first almost wholly in the tribe, the individual owning only his food, clothing, and shelter; then in the state, and finally, in a mixed degree, in the state and the individual. The title attached either to persons, chattels, or land.* The economic principle underlying society is that no person will devote much labor upon that which he does not own, and will not work except for his personal and private benefit, but will work assiduously and industriously where the full return for his labor is to come to himself. In the degree, therefore, that private titles are multiplied and perfected, protected by law and vindicated by courts, differentiated in kind, extent, and duration, and adapted to the wants of a people in complexity of quality and and simplicity of transfer, in like degree is the production of wealth and increase of values promoted. Moreover, as all private title is carved out of what was previously a possession in common by the tribe or state, and as this process of carving out private titles is entered upon in order to stimulate activity in production by substituting the strong motive of private interest for the weak one of public interest, it may be said that the progress of industrial civilization is attended by a continual increase in the number and extent of the private monopolies through which society distributes at the most economic rate the services of its members to each other. The growth of productive energy is proportionate to the growth of private property. Private property is in all cases the conversion into a personal monopoly of something previously enjoyed in common. As private property advances, in the volume and quantity held by one owner, and in the number of owners, society, including the non-owners, gets constantly a larger measure of its use at a lower cost. Thus, at least in

---

should have the clearest views of the origin of Title. Blackstone ("Commentaries on the Laws of England," Book ii.) first divides Title, as to its vulnerability, into title by possession, by right of possession, and by right of property. The two last are intensifications of the first, due to the continuance of possession in a manner indicating a greater or less acquiescence by others. He then divides it, as to its mode of acquisition, into title by descent and by purchase, both of which point back to possession as their origin. Under title by purchase he includes the several modes of acquiring by Escheat, Occupancy, Prescription, Forfeiture, and Alienation, which latter included alienation by will, by marriage, by gift, or by deed. Neither in English, Roman, Jewish, nor any other law was it recognized that title to property could be acquired by labor. As law is but the generalization of facts, it follows from this unity in the law that in fact labor never gave rise to a title, even in a single instance.

* "Outlines of Roman Law," by Morey, p. 23.

certain marked instances, an increase of monopoly in title works out a great diffusion of socialism in use, or the greater the number of exclusive ownerships of property the fewer are they who are excluded from its enjoyment, since it is only by having an exclusive title to many things we do not want, that we are furnished with the means wherewith to exchange for the many other things we do want.

In the communal life no man's time and labor can be his own or subject to his own direction. They must belong to the commune. In the completely communistic life, *i. e.*, where the relation extends to the sexes, even his wife and children could not be his own, and no one would own any relatives, since he could not distinguish his father from his uncle or his sister from his most distant cousin. Aristotle* pointed to these vagaries in Plato's Republic, twenty centuries ago, in much the same terms as they are exposed to-day, remarking, "For there are two things which principally inspire mankind with care and affection, viz., the sense of what is one's own, and exclusive possession; neither of which can find place in this sort of community." * * "Prosperity will increase as each person labors to improve his own private property."

53. The State as a Form of Monopoly.—A monopoly of the privilege or power to allot land, decide controversies, punish crime, levy taxes, and make laws is called the state or government.

It consists of a mechanism for vesting in a few persons certain general rights which may be supposed to have been previously diffused throughout the mass. The State begins therefore as a monopoly (compared with anarchy) of the privileges of compelling service, holding and exchanging property and making war, which is the primal form of making law. Later on it extends its supervision to worship, commerce, education, art and industry. In theory, in a republic the whole voting class take part in the creation of this mechanism for making laws. Still the mechanism when created becomes, for the time being, a monopoly of the law-making and law-executing power, to the direct exclusion of its creators. The title by which each officer performs his functions is a monopoly power, created by law, though he may be said morally to hold the power in trust, that he will exercise it for the public weal.

---

* "Politics and Economics," Bohn's Edition, p. 41.

The means of enforcing this moral obligation are, however, the very imperfect ones of withdrawing the monopoly and transferring it to another, and still another. But obviously mere rotation, in those who are to exercise a monopoly of power, does not lessen the exclusiveness of monopoly, at any one moment, but only its duration as to one person.

The philosopher Hobbes was among the first to advocate the theory that states originate in compact. This theory became very popular among advanced thinkers during the eighteenth century and finds vigorous expression in those sentences of the American Declaration of Independence which assert that "all men are created equal and are endowed by their Creator with certain inalienable rights, among which are the right to life, liberty, and the pursuit of happiness; that to secure these rights, governments are instituted among men; which derive their just powers from the consent of the governed."

In practice, governments derive their actual power from the ability of an aggregated constituency to suppress all opposition. This is the only test known to history or international law. The consent of the governed, to the current conduct of a government, through the election of its officers, has been asked only in Greece, Rome, England, America, and a few other states in a modified and partial degree. Hence, under the definition prescribed by the Declaration above referred to most actual governments would be held to have had no just powers.

The political scientist, searching for the origin of government, can not be bound by the language of a document designed rather to promote a revolution than to preserve a calm and exact equivalence between the figures of rhetoric and the facts of history. Most governments have originated, historically, in usurpation and seizure of powers, by men who had the strength and will to govern, who had in view the profits, plunder, and wealth they could amass to themselves in the exercise of their power, and who, in all the earlier history of mankind, would have laughed at the notion that equity, justice, or the common welfare formed any leading feature in their thoughts.

As property begins in appropriation of men, lands, and goods, so do governments begin in the appropriation and assumption of power over men, lands, and goods. Hence, title to property and to government are in their origin one; both are involuntary, since man can not help owning and governing, or being owned and governed. Before it existed among men it had begun to

exist among animals, and in the co-operative class of animals and insects, the ant, bee, beaver, etc., it was carried to great perfection by instinct.

Not only is government due to an exercise of power which compels consent on the part of the governed, but each advance in government is due to the innovations introduced by those who for the first time usurp unwonted powers. In this way particular portions of government grow by usurpation, under strong men, and are eliminated by timidity, while filled by weak men.

Because Chief Justice Marshall was a strong man, individually, the Supreme Court of the United States obtained the unforeseen power to adjudge an Act of Congress unconstitutional. Because President Jackson was a strong Executive, Congress lost, through his veto, the power to incorporate a bank of the United States. Because George III. was obstinate, without being strong, and so lost the American colonies to Great Britain, the ministry in England ceased to be the servants of the Crown, and became the servants of the House of Commons and masters of the Crown. As governments are daily molded into new forms by the power and genius of the men who administer them, so in all times title to property has been in a degree the plastic expression of the dominant will of the class who succeeded in appropriating, developing, and creating the property. Before all statutes come the judicial decisions in similar cases, of which the statutes are but the condensed result. Before the judicial decision, there must have been a case to decide. Before there could be a case to decide, some one man must have usurped a right with which another was unfamiliar, pursuant to an interest, or appropriation of values, which the other opposed. Hence, law carries us back to usurpation and contest, rather than to compact, as its origin. And when the individual title has been vindicated, by contest in court, each ramification of its development into many estates, modes of transmission, capacities for concealment and means of subdivided enjoyment becomes also the subject of enactment into statutes only after their nature has frequently been passed upon by courts, in consequence of a judicial question arising between an aggressive innovator, or usurper, or appropriator, on the one hand, and a conservative defender on the other.

The law of titles to property, therefore, has risen into compact systems of jurisprudence as slowly and involuntarily as coral reefs have risen in the ocean. As each atom of lime in the reef is the skeleton of a dead insect, the residuum of his effort to sur-

vive as permanently as possible by making his nutrition exceed his waste, so in the law of titles, every principle evolved has been the contribution of a successful litigant, grappling with a defeated one, each animated by the desire to maintain an old right or create a new one, because behind the supposed right in either case lay a profit, or at least an excess of income over expenditure, which could only be obtained either by an act of appropriation or of resistance.

In this way the sons and servants of the household first expelled strangers from the inheritance and enjoyed it in common. Then the sons and daughters drove out the servants, and then in some instances the sons drove out the daughters, and the eldest son drove out the younger.

Thus the power to devise by will, and to convey by deed, grew into law. The power to mortgage, and to sell under mortgage, and to restrain from sale, are later powers, which were supposed to have been evolved within the period of the Roman law, until cuneiform inscriptions bring then to light in the ruins of primeval Asia. In every stage of this evolution the real goal and motive in the mind of each litigant was one of private profit. In the earliest stages of society the same motive animated the judge. To this day in Asiatic and African countries the client expects to influence the court by presents. At length as the judge came to achieve a greater unity of interest with society, he came to see his private interest in deciding questions in the manner most profitable to the general public, which is the ultimate definition of impartiality and equity. Thus, out of the motive profit, have been evolved law, justice, and equity.

Each advance, toward a refined system of jurisprudence, consists in a clearer vindication of private title in that which had anciently been common right, accompanied by a larger power of use in exchange on the part of the owner, attended by a more equal diffusion of the utilities resulting from the use among mankind.

Thus land, held communally by the tribe, can only be used for hunting or fishing, and can not be tilled until private title is acknowledged. The first to fence and till it is a usurper and an encroacher; so is the first to defend it as an inheritance, or as a grant, or to hold it in partnership or for a debt. But, in the sum of these usurpations and encroachments, lies the evolution of title to land into that stage wherein the secure possession of it and its fruits can be transferred in fee, for life, for years, at will or for an hour, by deed or by devise, to one or to many, or to a corpo-

rate one composed of many, in absolute right of enjoyment or in trust or to secure a debt, in perpetuity to a charity, or in expectancy to some person now unborn.

With each increase in this security of title, there is an increased power of deriving profit from its use, which is itself the measure of the increased degree in which it serves the wants of society at large.

Titles alone render industry possible by rendering the future foreseeable. When they who fought in the wars of the Roses on either side could convey their lands securely to others, in trust, and thereby exempt them from confiscation for their treason, a crime equally chargeable on whichever side they fought, or if they refused to fight on either, the tenant holding a lease from their grantee could till the lands of a traitor in perfect security as to his crops, while the soldier of fortune went on fighting in equal security as to his title. Thus a secure division of labor was effected, whereby the one aided in perfecting the stability of the state, while the other aided in maintaining the supply of food.

The first salvor, who tied the vessel he had saved from wreck to his own and towed her into port, and then demanded half her value for his services, converted into private right a service which, if rendered at all, must have been previously rendered for the public weal. But when the courts gave the suitor his claim the public weal was far better served than by denying it, since twenty vessels would now be saved for private profit where one might have been saved from generous motives.

The first carrier who exacted a fare for carrying a passenger over a public highway, where, so far as travelers had previously been carried at all, they had been carried gratuitously, was as truly a usurper and monopolist as the first man who fenced land previously held in common. But when his demand was sustained, the transportation of passengers and freight made its first step toward the modern railway system. The first man who took his neighbor by the collar and led him before a magistrate, because he did not fulfill a promise, was doubtless denounced by the promiser as a usurper. But when the court assumed jurisdiction and sanctioned the act there was a beginning of commercial law and of commercial honor.

54. Title, the Source of Exchange, and of Division of Labor.—The principle in human nature, which compels the creation of the monopoly known as The State, is the same as that which compels private title to land and to all other forms of property, viz., that whatever, to use a homely phrase, is every body's

business is nobody's business. To have the work in any department of effort well done, those who do it must have a reward proportionate to the value of their work to society, and a training and capacity adapted to the particular kind of work. Government is one of the first steps toward, what Herbert Spencer and the sociologists have called the specialization of functions, and what Adam Smith and the economists have styled the Division of Labor. As men can only make good watches who are proficient in the "art and mystery" of watchmaking, so skill in framing and administering the laws and economies of a nation can only be attained by men skilled in the knowledge of those laws and economics. It would be as great a waste of time and diversion of effort, on the part of most farmers, miners or fishermen, for them to devote the degree of study and investigation to laws and economics which would be essential to make them very poor judges, lawyers, or legislators, as it would be on the part of a legislator to attempt to become an expert fisherman. But the power to administer government, wisely and well, is not wholly an affair of accomplishments, or which can be learned in schools. Even if it were, the power and address essential to get office under any system of government, are qualities without which the ability to govern, when in office, would be of no value. These powers to get office often arise in the most fortuitous and accidental way, out of qualities of character which are by no means identical with those which would insure a proper performance of the duties of office. Hence, while the state theoretically assumes that its officers are selected for their higher skill in administering official duties, they are in fact often selected through their higher skill in manipulating the machinery of selection, a species of skill which, in certain instances, may even unfit them for a wise performance of the duties of office, as where the machinery of selection may be influenced by bribery and the duties of the office may be to punish bribery and the like; still, in a crude way, the state is a mechanism for vesting in a few specialized and skilled persons, the business of making and administering the laws, and it works by making the emoluments and honors of office so profitable that it becomes a matter of private interest to make a profession and business of attending to matters of public interest. In so far, therefore, as the state is useful, it becomes so by the fact that it usurps, appropriates, and seizes, or society tacitly grants to it a monopoly, of judging concerning jural, economic and social questions, or of the functions of making, executing, and construing

the laws. Government is a monopoly of the power of decreeing and executing justice. Historically, the monopoly of power comes first, and the desire to do justice, later. Government, in its barbarous beginnings combines the maximum of force with the minimum of equity. Theoretically, but for government, all men would have an equal say as to what is right. Practically, very few men would think of right, as power would be the only thing desired. So, before private property in land is established, all men have nominally an equal right to the use and product of all land. But the right of all, to use for hunting, precludes the right of any, to use for farming and gardening, and so prevents each man from producing as much as he immediately wants, thus chaining all down to the severest penury. Private property in land steps in, to make it the interest of each to produce what others want, by enabling him through his private title to that which he produces, and through the better mode of tillage which comes only with exclusive title to the soil, to buy what another has produced. Thus private property in land is essential to exchange, because that which all own no one can sell, and land owned by all does not admit of those permanent crops, orchards, improvements, etc., which extend over years. Under a state ownership, or tribal ownership of land, there must necessarily be a state, or tribal title, to all its products, and to the labor itself which produces the products, and hence a right in each to enjoy them, but in none to exchange them. Whatever each gets he must get by allotment. Hence the monopoly of the land, by giving to individuals a private title, is essential to each individual having a title to his own labor, and to that wide diffusion of a great diversity of products which is brought about through exchange, commerce, trade, buying and selling. While the monopoly seems to build up the individual at the expense of the public, it really is the first step in freeing the individual to serve himself and inciting him to serve the public, by making it a source of profit and power to him, to produce on his land a vast excess of commodities of which he has no need, because he knows that those commodities, being his own, can be freely exchanged for those he needs, thus in the end securing to him a far greater variety and diversity of commodities for consumption, than he could in person produce. Whatever advantages to society grow out of commerce in commodities and division of labor are indirectly due to that private title in commodities, without which no such facts as commerce, or division of labor exist.

Private title in commodities is inseparable from private title in the instruments by which commodities are produced, *i. e.*, the land, labor, and other means of their production. If the latter are owned in common by all, the former must be allotted so that each shall get a share proportionate either to his needs, his desert, or his importunity and troublesomeness. This, as we have seen, is done in all socialistic and tribal stages of growth. But in this condition of things the collective state, or its chief, is the only exchanger, and it can only exchange with somebody outside its frontiers. Members of a state, which provides for all its members out of a public crib, have no motive to exchange and no private title to commodities. A social, tribal, or communal ownership in land, by involving logically a like ownership of labor, goods, and products, perpetuates poverty, slavery, and indolence, by paralyzing commerce.

55. Titles Becoming Private.—The first essential condition to commerce and division of labor being private ownership of land and goods, it follows that the growth of a country in wealth, production, and civilization will depend largely on the degree in which it asserts this principle of private ownership, *i. e.*, the promptness with which it converts its lands from tribal, communal, or national to individual ownership.*

---

* It seems to have been a notion generally entertained in the ancient world that every citizen of a country should be a landholder; and that the territory of a state, so far as it was not left uninclosed or reserved for public purposes, should be divided in equal portions among the citizens. Such a distribution of public land seems to have been acted upon as a recognized principle from the earliest period to which existing historical records extend. (Encyclop. Brit.—Art. Agrarian Laws.) Hence the division of Canaan into private allotments to every Hebrew (Numb. xxxiii. 54), naming every allottee (Numb. xxxiv. 18). The year of jubilee did not return these lands thus privately allotted into *hodge podge* or communal ownership, but only restored them from grantees and mortgagees to their original owners or their heirs (Numb. xxv. 10). In the republics of ancient Greece and in the Grecian colonies a similar system of division prevailed (Thucyd., v. 4; Herod., iv. 159). Lycurgus is represented by Plutarch (Lycur.) as redividing the whole territory of Laconia into 39,000 parcels, of which 9,000 were assigned in equal lots to as many Spartan families, and 30,000 also in equal lots to their free subjects (*ib.*). But this equal division of land between private owners did not imply among the Greeks that the equality of ownership should be forcibly maintained.

The enactments among the Romans for dividing the public domain (*ager publicus*) among private holders were called Agrarian laws. For a long time they were misunderstood to mean enactments for prohibiting Roman citizens from owning lands above a fixed amount, and as authorizing the division among the poorer classes of the estates of private individuals when these exceeded the prescribed limit, thus legalizing a system of plunder which would have been subversive of all social order. No such laws were enacted in Rome or any other state. The Agrarian laws merely provided that where citizens had appropriated more of the public domain than they were by law allowed to do they should be required to restore, but had no relation to lands acquired by

The distribution of the land of the United States, from the form of communal ownership in which it was held by the Indian tribes, and in which it was first feebly attempted to be held by the settlers at New Haven, Jamestown, and Plymouth, into private ownership, was a substitution of self-interest in lieu of social interest as the motive to industry. The intrusting to private railway corporations, of the business of giving cheap transportation to markets, came to be a means of effecting a most important public function entirely at private risk as to loss, and at private cost as to capital. The evolution of the land system and the railway system of the United States were thus the concurrent working of the principle that private title, or the profits of monopoly, form a far stronger inducement than public spirit, to the expenditure of inventive force, and of capital, in ways that are socialistic in their results. Nothing serves society at large more usefully than steamers, railways, printing presses, telegraph facilities, power looms, spinning jennies, the manufacture of India rubber, photography and the like. But to perfect each of these in the breadth of its social use, *i. e.*, in the number of persons who might enjoy its use, some new form of aggression on private right was invented and sanctioned by law and some new mode of private title was created. For railways, their projectors were allowed to take lands for a way over which they alone could draw their carriages. Previous ways had been open to the carriages of all. For the highest utility of printing presses men were denied the right to manufacture copies, indefinitely, of any book they might possess. For, when all books were written, every

---

purchase, or otherwise than by fencing in, unlawfully, portions of the public domain. (Encyclop, Brit.—Art. Agrarian Laws.) This was demonstrated by Prof. Heyne of Gottingen in 1793, by Heeren and Hegewisch and by Niebuhr (*ib.*).

In its article on commons the Encyclopedia Brittannica says: "It is a well-known result of the application of the historical method to laws and institutions that it has reversed many of our leading conceptions of the natural or original forms of property. That the primitive form of property in land was not severalty but commonalty, that land was held not by individuals but by communities, and that individual ownership was slowly evolved out of communal ownership, are propositions as nearly as possible the opposite of our *a priori* ideas on the subject. The existence of rights of common is one of the traces of the ancient system still remaining in our law, but its real significance was for a long time obscured by the feudal theories on which the law of real property is based. Among the English, as among other Teutonic nations, the system of landholding by village communities prevailed. . . The increase of the population and the growing need for food-producing land made it the interest of both the lord and of the public also that much of the common ground should be brought under cultivation. Down to the year 1800 this was effected by private inclosure acts, of which there were as many as 1600 or 1700.

scribe was free to copy any book. With printing came the new form of monopoly known as copyright. And this monopoly, in the profit of multiplying copies of a book, effects a far greater multiplication of copies than would be effected without it.

Land being the primary implement, agent, and condition of all production of commodities, the first economic requisite to the rapid and cheap production of them all, is that title to land shall be easily obtainable, and when obtained, shall be easily defended. When, to these, are added ready access to the consumers of land products, and a free influx of all the industries which can use the land most productively for mankind, all the conditions of growth in wealth are assured. The monopoly of land by great families in England causes the government there to be aristocratic. The early diffusion of land in America caused the republic.

56. The American Land System.—A few colonists came to America for opinion's sake, and a few for crime. The great mass came hither for profit, to better their pecuniary condition. Had the governments, which first obtained footing in America, limited the land system by making large grants to a few proprietaries, and exacting that these should grant only leases to tenants; and had they, without jealousy, created the large proprietors into a peerage, with like powers to that of England, including seats in the British House of Lords, while the colonial delegates should have like seats in the Commons, it is difficult to prove that the Anglo-Saxon race might not have continued to this day to be one empire. A difference in the allotment of land left the colonies without the materials for representation in the House of Lords. The creation of colonial legislatures provided them with a satisfactory substitute for the Commons. Hence the colonies fell away from Great Britain, because not allowed a representation they had never desired. During the colonial period the increase in population in the territory of what are now the United States was slow. The entire population in 1680, sixty years after the landing at Plymouth and seventy-three years after the settlement of Virginia, was only 80,000; in 1701 it had grown to 260,000; in 1753 to 1,051,000; in 1775 an official estimate made it 2,383,000; and in the first census of 1790 it was as follows:

Virginia	747,610	Connecticut	237,946
Massachusetts	475,327	New Jersey	184,139
Pennsylvania	434,373	New Hampshire	141,885
North Carolina	393,951	Georgia	82,548

New York	340,120	Rhode Island	68,825
Maryland	319,728	Delaware	59,094
South Carolina	249,073		

During the first ten years of independence immigrants came to the number of only 4,000 yearly, and in 1794, the year of the French Revolution, to 6,000.

The cession of large portions of land to private aristocratic proprietors, and the restrictions forbidding the colonists to manufacture machinery, cloths, iron, steel, etc., contributed, with the insecurity attending pioneer life among savages, to check immigration. Some of the private proprietors, including at least those in New York, intended to follow the English or feudal precedent of renting their lands to tenants, retaining forever the fee. Such a system, logically carried out, would have resulted in a landed nobility and House of Lords like those of Great Britain.

With the establishment of national independence in 1783,* the legal theory became, in the United States, that all titles to land are derived from the government of the United States, as in England it had been that all lands are held immediately or ultimately of the king. Within the original States, only the lands remaining unappropriated, and those belonging to Tory owners, and passing by forfeiture to the government, ever actually vested in the United States. By the acquisition of the Northwest Territory and Louisiana it devolved on the government to become the distributor, to private owners, of an area east of the Rocky Mountains, as large as China, and half as large as Europe. The present total area of the United States, including Alaska, is 3,603,884 English square miles, exclusive of the lakes and other waters, while that of Europe is 3,828,328 square miles.

The policy adopted by the United States was that of giving the lands to actual settlers, at a price per acre barely sufficient to pay the cost of survey and of the land department, surveying the lands on lines corresponding to the four cardinal points of the compass, so that the exact location of all lands for transfer, occupancy, or search of title could be expressed by a brief formula. This was done by running a meridian line north and south through some arbitrary point selected for convenience, then a base line east and west through the same point. One point of this kind exists in Ohio, and the meridian line which runs through it is called the first principal meridian, or in the language of con-

* Supreme Ct., Johnson *vs.* McIntish, 8 Wheat, 543 ‡ 3 Op. Att. Gen. 333.

veyancing 1st P. M. The second principal meridian line is in Indiana ; the third makes its point of intersection with the base line at Vandalia, Illinois, the fourth in Western Iowa, etc. Lines drawn parallel to the meridian line at intervals of six miles, whether eastward or westward, are called ranges, those to the eastward being range 1, 2, 3, etc., east, and those to the westward, range 1, 2, 3, etc., west of the meridian. Lines drawn parallel with the base line, whether to the northward or southward of it, become township lines, since the intersection of each with the meridian lines marks a plot six miles square, which is the township of the land surveyors. In fact, also, the organization of the people into townships usually follows these lines. The location of the township, east or west of the meridian, is designated by the range number, and its location north or south of the base line by the township number. Thus T. 38, N. R. 14 E. of 3 P. M. in Cook County, Ill., designates a township, being the 38th to the northward of the base line, in the range (of townships) which are on the meridian line the 14th eastward from the 3d principal meridian. Each township is divided by similar parallel lines into 36 sections.

The sections are numbered as follows :

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

The sections proceed by halving and quartering, or otherwise, until the definite lot, however small, is reached. Property worth millions may be thus described as lot 44 and N½ of lot 43, in block 2, Lockwood's subdivision of south half of W. ½ of N. E. ¼ of N. W. ¼ of section 3, T. 38 N. R. 14 E. of 3 P. M. The starting point of this description is at Vandalia, yet the land which it accurately describes is near Chicago.

The simplicity and celerity with which conveyances can be executed and recorded, and titles searched, and certified, is also an element in bringing about the easy transferability of land. The

several States, at an early date, adopted the system of recording instruments affecting real property, and provided that subsequently executed instruments, conveying interests in lands to purchasers for value, in good faith, and without notice, to them, of the existence of any prior, unrecorded, conveyance, will have precedence of the prior, unrecorded, conveyance. This enables a purchaser of land, generally, to learn by a search in one or two offices whether his title is valid. Judgments of the federal courts become liens, within the district of their jurisdiction, without record in any State office. The facts of heirship, deaths, and marriages must also be traced outside the record. These provisions were a vast improvement on the English system, which lacked the provision making conveyances, in good faith, valid in the order of priority of record. Hence, in England, search was necessary in every place where an instrument affecting title might happen to be. In some cases, of property of considerable value, the legal charges, for making the transfer and becoming satisfied of the validity of the title, exceeded the whole purchase money paid for the land.

Since the system of registration of deeds was perfected in America a still more perfect system, known as the Registration of Titles, has grown up and is practiced in all the colonies of Australasia, and, it is said, in several smaller states of Europe. This consists in vesting the recording officer with power to make the title perfect in the grantee by simply recording the conveyance to him, as the title to a note is good, in the hands of a *bona fide* endorsee for value, even though there may have been a fraud or theft in the previous course of transfer. Such a system makes land as negotiable as commercial paper.

The Register is required to use care in recording the instrument, both in searching the previous conveyances to accertain in whom the present title is, and in properly identifying any new grantor as being the same person as the last grantee. An insurance fund is also provided, by requiring that a small fraction of one per cent. on the value of the land, should be paid as a transfer and recording fee, and out of the fees thus received a reserve is held for the purpose of indemnifying any owner who may lose his title by this system. Very few losses, in all not exceeding £8,000, have been paid out of this fund, which now amounts to about £158,000, and in three of the oldest colonies, viz., New South Wales, Victoria, and Tasmania, the fund is still intact.

The United States have not thus far limited the quantity of

land a single purchaser could monopolize, nor prohibited the free purchase of lands by citizens of foreign countries. Such, however, is the objection felt in many quarters to the extensive purchase of lands by foreign capitalists, which have, in a few instances, been made, that legislation to prevent it in future is probable.

During the reign of George II., the British Parliament provided that the writ of execution for debt, to be issued in the Colonial Courts of America, should call for the sale of the lands and tenements of the debtor as well as his goods. In Great Britain, a land-holding debtor might be dissolute, insolvent, and bankrupt, but no creditor could, or can to-day, obtain any writ of execution which will sell the debtor's land. Hence, there, "once a landlord always a landlord." If he bets away his fortune at the races, the return of his quarterly rent days will soon restore the means to bet again. In America, however, the largest landed estate is dissipated by the first spendthrift who comes into its possession, provided he become a bankrupt.

In England, also, the law of primogeniture (preference for the oldest son) required the estate to descend to the eldest son only, unless it was otherwise disposed of by will. The law of entail also permitted the land to be so given by deed or will that only a life estate should at any time inhere in its present owner, the inheritable fee being at all times in the heirs in perpetuity. These two laws tended still further to tie up the trade in land in England. In America, in all the colonies, or as soon as they became States, it was provided that all land should descend at death equally to all children, and wills or deeds which tied up the title by entail, so as to render them untransferable for more than the lives of one, two, or three persons were made void.

Throughout America, also, State, county, town, and school taxes rest directly on land, as a rule. If not paid, the title to the land is sold for the tax. In this respect the so-called land tax in England, which is only in law a tax on the occupant, though called a land tax, does not resemble the American taxes on land. In default of payment of the English land tax the writ for their collection is powerless to sell the land. It authorizes only a distraint on the goods and chattels of the occupant. It is a tax on occupation, not on ownership.

In America, land is everywhere saleable for both taxes and debts.

Bounty laws were, from time to time, passed, donating certain

quantities of land, usually 160 acres or 80 acres, to persons who had served as soldiers or sailors in either of the wars of 1776-'83, of 1812-'15, of 1847 to 1848 with Mexico, or of 1861-'5 with the seceding States. Public lands were also donated to aid in the construction of canals, and section No. 16 in every township was donated to the support of schools.

By an Act of Congress, also, lands proportionate in quantity to the representation each State had in Congress were donated to it for the endowment of an agricultural college.

By all these causes, land was forced upon the market in quantities so that each man could get his 40, 80, 160 acres, half section or section of land at near the government price, $1.25 an acre, until the influx of "settlers" gave it a higher value. The first settlers, so far from fearing "monopolists," were glad to have either resident or non-resident capitalists buy in their neighborhood, as it tended to raise the value of the land, and gave them a class of taxpayers on whom they could freely levy for cost of schools, court-houses, bridges, roads, and local improvements. In some of the Western and newer States, local taxation, in the hands of resident voters, tended to throw as much of the burden of taxes as possible on non-resident owners of lands. The profits of land-owning were thus kept down to the minimum, and the inducement to monopolize land was small. It hardly became matter of complaint until about the year 1870.

57. Effect of Free Land on Immigration.—Freedom of individual conduct and belief, equality in political rights, and abundant supplies of cheap land, supplied the chief inducements to immigration from Europe down to 1851. Since then the gold and silver mines, the rapid progress of railroad building, and the growth of manufactures, under the stimulus supplied by an abundant currency and a partial protection of American producers against the importation of competing goods, have largely increased the inducements to immigration previously existing.* The rate of increase has been so evenly from 33 to 35 per cent. in each decade that, as early as 1830 statisticians began to compute accurately the future rate of increase of the Republic. Dr. Carey, in 1835, placed the population in 1880 at 60,000,000, which has been verified. Similar estimates show a population in 1930 of 191,000,000. This future rate of increase

* Since 1790, when the first census was taken, the following table shows the increase in every ten years :

of American population, if no great wars intervene, is one of the most demonstrable theorems in social science.

Since 1819 a careful register of immigration has been kept, the result of which appears in the table contained in the note.

By comparison of this table of immigration with the facts set forth in the chapter on "Commercial Crises," it will be seen that the movement of population into the country, while somewhat affected by the Irish famine in 1846–9, was most rapid in the years

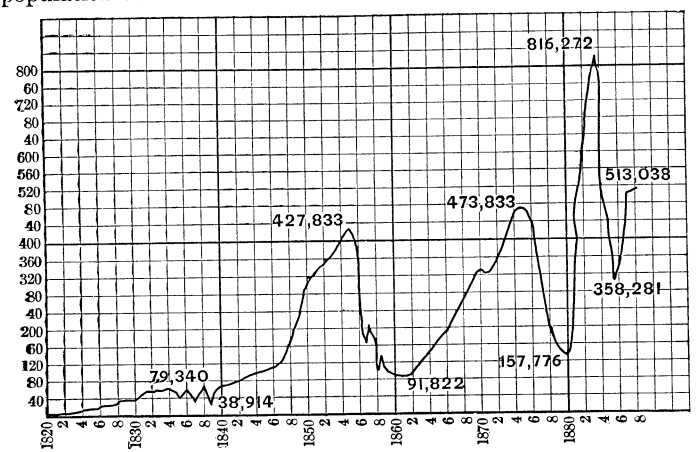
Year.	Population.	Increase.	Per Cent.	Extent of Territory. Year.	Engl. Sq. Miles.
1790	3,929,827	———	——	1793	805,461
1800	5,305,925	1,376,098	35.02	——	——
1810	7,239,814	1,933,889	36.45	——	——
1820	9,638,131	2,398,317	33.13	——	——
1830	12,866,020	3,227,889	33.49	1830	2,150,000
1840	17,069,453	4,203,433	32.67	1840	2,308,362
1850	23,191,876	6,122,423	35.87	1850	2,743,500
1860	31,443,321	8,251,455	35.53	——	——
1870	38,925,598*	7,482,277	23.79	1870	3,603,884
1880	48,141,800	9,216,222	——	——	——

Year.	Immigrants.	Year.	Immigrants.
1820	8,353	1854	427,833
1821	9,130	1855	200,877
1822	6,911	1856	200,436
1823	6,350	1857	251,306
1824	7,612	1858	123,126
1825	10,199	1859	121,282
1826	10,837	1860	153,640
1827	18,815	1861	91,920
1828	27,382	1862	91,987
1829	22,520	1863	176,222
1830	23,322	1864	193,418
1831	32,633	1865	248,020
1832	60,482	1866	348,554
1833	58,640	1867	298,358
1834	65,365	1868	297,205
1835	45,374	1869	385,287
1836	76,242	1870	361,238
1837	79,330	1871	367,789
1838	38,914	1872	449,040
1839	68,072	1873	437,004
1840	84,006	1874	277,511
1841	80,289	1875	209,036
1842	104,565	1876	224,860
1843	52,196	1877	130,503
1844	78,615	1878	153,207
1845	114,371	1879	177,826
1846	154,416	1880	457,257
1847	234,968	1881	669,431
1848	226,507	1882	738,902
1849	297,011	1883	603,322
1850	361,863	1884	518,592
1851	379,466	1885	395,346
1852	371,603	1886	334,203
1853	368,564	1887	490,109
	Total since 1819,		

Of the total population in 1790, 17.8 per cent. were slaves. In 1860, 12.6 per cent. were slaves.

* Including Indians and Alaska.

of money inflation, and of great activity of the societary movement, whether induced by protection, war, or increased production of gold and silver. While the magnitude of the immigration maintains a general increase in subsequent years over earlier, it more than doubles between 1826 and 1828, a period of protection; doubles again in 1832—over 1831—drops slightly in 1833 on the passage of the Compromise Tariff; rises slightly in 1834, but drops sharply in 1835; attains a great height in 1836 and '37, and again in 1842, but drops one-half in 1843; resumes its upward course in 1846; is heaviest in the periods of the Irish famine (1846–9), the revolutions in Europe, 1848, and the California gold supply, 1849 to 1854; but in 1854, in the midst of this gold supply, it drops one-half, thereby showing that the condition of industries in the United States was then very bad. In fact, from the winter of 1853–4 to the bank crisis of 1857 the manufacturing industries in the United States had been in a low, typhoid condition, owing to the causes named in our chapter on "Crises." From the high-water mark of 1854 the immigration declined, under the policy of the almost free importation of foreign goods, from 427,833 in 1854 to little more than a fourth that number in 1858–9. It sank still lower in the first two years of the war, but in the second two years it nearly resumed its former rate, but did not pass the rate of 1854 again until 1872 and 1873, which were years of marked activity in railroad building. The following static chart shows the rate for each year on a scale of 40,000 population to the section line:—



IMMIGRATION INTO UNITED STATES FROM 1820 TO 1887.

It is estimated that between the years 1820 and 1876 the immigrants arriving were, as to nationality and race, as follows:—

English and Irish	4,527,892
Germans	2,889,235
Swiss	77,299
Austrians	49,793
Swedes and Norwegians	263,994
Danes and Icelanders	41,417
French	300,259
Italians	56,874
Spaniards and Portuguese	34,717
Belgians	21,498
Dutch	42,401
From Canada and British America	469,450
West Indies	59,569
Chinese	196,891
Japanese	337

Officers in charge of the immigrants estimate the money brought into the United States by the immigrants for the ten years, 1850–1860, at £83,333,333. Prior to 1860 the sentiment of the country was in favor of immigration, and every immigrant was valued, though he brought only his muscular strength, as an accession. Since 1865 a sentiment has arisen in favor of an assorted immigration, to the exclusion of Chinese, paupers, bound laborers, gypsies, persons bringing disease, and criminals.

58.—Wasting the Land.—The opening up of new lands in America, and the denudation of timber, has been done in a way to sacrifice the largest future interests to the smallest present interests, which is the essence of waste. Dr. Franklin B. Hough, Chief of Forestry at Washington, estimates that in 1870 our entire area of remaining wood lands of every kind was 380,000,000 acres, that we were stripping the wood from 15,000,000 acres yearly, and were planting less than 10,000 acres. If these dates were correct there has been a subsequent reduction of 160,000,000 acres, leaving 220,000,000 acres standing, or enough to last twenty-two years longer. It is also estimated officially that the mills of the Northern States, if they could be planted in the South, would saw up every standing pine in Florida or Alabama in twelve months, and would require but six months more for that of Georgia or either of the Carolinas. Three hundred million dollars worth per year are being cut, of a crop which nobody is planting, not because it is not one of

the most profitable of crops, but because no private individual can afford to plant an agricultural crop which he must wait twenty-five years to reap. It is estimated that our white pine and spruce supply may not last a decade. Yet it is matter of easy computation that in thirty or forty years land in most parts of the United States, if left to grow up to timber, would, without labor, produce a crop the value of which on the stump, if spread over the period, would divide to each year about as large a return as can ordinarily be got out of the land by labor.

All this points to substitution of brick, iron, straw pulp, and similar materials at an early date, for wood. Forestry associations for planting trees have been formed in Ohio and elsewhere, but no effective check on the timber waste has yet been devised.

The rapid destruction of the forests, of the Appallachian chain and Adirondacks, has also lessened the beauty and value of many American streams, by causing the entire waterflow occasioned by the melting of the winter snows to pass off in destructive freshets or floods in the spring, after which the streams are nearly dry. In the Ohio and Mississippi these spring floods are becoming each year more destructive of life and property; and are suggesting as remedies either extended plans of irrigation by canal, which will draw off these extra supplies of water, or systems of dams along the rivers to retain it, or a compulsory restoration of the forests.

It is worthy of note that in China all these plans have been adopted. The fact that their river system is more nearly like ours, than that of any other country, may in time compel our legislation concerning rivers to more nearly approach theirs.

The wasteful destruction of buffalo, deer, prairie pheasants, and other game on our Western plains, and of birds of every kind, and especially singing birds in the Western States, in response to the demand for birds for ladies' hats, are forms of waste for whose avoidance legal penalties have been invoked.

In our streams and lakes the artificial propagation of fish has had the effect to partially restore the original supply.

Marked economic effects have attended the building, or failing to build, important highways in the United States, of whatever kind, where opportunity and need existed. The early topographical engineers of the country, including especially George Washington, who was an engineer by profession, foresaw that at whatever point on the Atlantic coast an outlet should be made for the products of the Mississippi and Ohio valleys, a great, probably the greatest, Atlantic seaport would arise. Virginia was at this

time far in advance of the other States, and especially of New York, as is shown by a call made by the General Government upon the States in 1781 for money. The sum to be raised was £1,666,660, and it was divided among the original thirteen States according to the supposed value of their cultivated lands, since it was to be collected, by each State, by direct tax on land. The division was as follows:—

Virginia,	£272,415	South Carolina,	£177,834
Massachusetts,	272,395	New York,	77,832
Pennsylvania,	233,498	Rhode Island,	45,142
Maryland,	194,582	New Hampshire,	36,124
Connecticut,	151,499	Delaware,	23,351
New Jersey,	147,078	Georgia,	5,130
North Carolina,	129,724		

Even in 1810 the city of New York had a population of 96,377, while Philadelphia had 96,691, Baltimore having 46,555, Boston 32,250, New Orleans 17,212, Cincinnati 2,540, and Brooklyn 4,462. It is difficult even at this day to perceive that Washington's calculation, that the metropolis of the Atlantic coast would be at Norfolk, might not have been verified by sufficient enterprise on the part of the people of Virginia. Washington urged the legislature of Virginia to build a canal connecting the Ohio River and the James or Potomac, so as to place the outlet at Norfolk. His advice was not heeded. Subsequently New York, under the leadership of DeWitt Clinton, constructed the Erie Canal, connecting Lake Erie at Buffalo with the Hudson at Albany, then a stupendous feat of State enterprise in finance and civil engineering. Until that canal was built New York city had little more than the trade of the Hudson River Valley. The building of the canal made New York the Empire State, and the city the commercial metropolis of the Union.

59. The American Railway System in Its Unproductive Infancy.—American railways have passed through the several periods (1) of infancy and feebleness, demanding State aid at every step; (2) of incipient profits and precipitate haste on the part of municipalities, counties, and adjoining owners to embark in them for the value they would give to the lands adjoining; (3) of consolidation of continuous lines and pooling of competing lines, ending finally in a condition of stability, profit, and security; (4) of severe criticism and assault on the part of shippers of freight as to the discriminations in freights and fares deemed

necessary by the railways; (5) of enormous railway grants in aid of transcontinental routes of vast future importance; and, finally, (6) of the appointment of State Boards of Railway Commissioners and the recent adoption of national legislation whose effects are not yet matured.

At the outset, in the Eastern States, railroads crept feebly into being by scattered efforts, involving much individual sacrifice.

Some town and county aid was given, or loaned, by subscriptions to stock and bonds. Frequently English loans were obtained of money enough to buy the rails, or sales of the iron rails were made by English rolling mills taking stock or bonds in return. In a rough way it might be said that individual enterprise bought the cars, town and county aid furnished the right of way and graded the roads, and English mills turned out rails in exchange for the bonds.

The first railroad projectors had no conception of the length of road required, and concentration of traffic essential, to make steam railways pay a profit. Many of them began with small capitals. The New York and Harlem Railway began (in 1831) with a capital of $350,000, authorized to construct a road from 23d Street to Harlem River, about five miles.

In 1826 the merchants of Baltimore, perceiving that the public works of Pennsylvania, and the Erie Canal, were attracting to Philadelphia and New York much of the tariff from the West, in which Baltimore had formerly participated, began to project a railroad which should connect that city with the Ohio, in lieu of the Chesapeake and Ohio Canal, which had been found to be a work of much difficulty, in consequence of the high elevations over which it had to be carried. At this date no railroad, either in Europe or America, had been constructed for the general conveyance of freight and passengers. In England an iron tramway, the Stockton and Darlington Railroad, had been constructed for carrying coal, and near Boston the Granite Branch Railroad for carrying heavy materials to tide-water. It was much mooted whether, in case railways should be adopted, horses or steam would be the better power. The Liverpool and Manchester Railway in England was, however, in course of construction, and 2,000 miles of railway were projected.

The first railroad charter, issued in the United States, was issued to the Baltimore and Ohio Railroad Company, at the solicitation of Philip E. Thomas, president of the Mechanics' Bank of Baltimore, its chief projector. The State of Maryland voted aid to the

amount of $500,000 in 1828 ; work was begun amidst imposing ceremonies. Congress was prevented from voting aid only by the fact that the chairman of the Committee of Roads and Canals was also president of the Chesapeake and Ohio Canal Company, whose interests conflicted with those of the proposed road. On July 4th, 1829, Charles Carroll of Carrolton, whose remarkable signature adorns the Declaration of Independence, presided over the ceremony at the age of ninety years, remarking that he considered the act second in importance, in his life, only to the signing of that Declaration, if, indeed, it was second to that. In the ensuing October, eleven and one-half miles were being graded, and one and one-half were ready for rails. Horses and mules were relied on for drawing the first "brigade of cars," the word train having not then been applied to this new use. Four brigades of cars each day were run between Baltimore and Ellicott's mills, on July 5th, 1830. Locomotive engines had not demonstrated their capacity to attain a higher rate of speed than six miles per hour in England, until their use on the Liverpool and Manchester road in the same year. The company advertised for locomotives in 1831, offering rewards of $4,000 and $3,500 respectively for first and second best, and in response to these bounties three engines were placed upon its track, one of which made a speed of thirty miles per hour.

In 1832 the further building of the road was arrested by a decision of the Maryland Court of Appeals that the Chesapeake and Ohio Canal had a prior and exclusive right of way over that portion of the route lying between Point of Rocks and Harper's Ferry. In 1833 this difficulty was compromised, by the company assuming the State's obligation for 2,500 shares of the stock of the canal company, when the canal reached Harper's Ferry. The company were the first to insert steel springs under the locomotive tenders and burden cars, thereby saving one-third in cost of carriage and wear and tear. In 1835 the Washington branch was opened and carried 200 passengers daily. In 1835–6 the legislature of Maryland subscribed $3,000,000 to the capital stock of the road, as did also the city of Baltimore. In 1838 surveys had been completed to the Ohio River at Wheeling; the cost of the road was estimated for the whole route from Baltimore to Wheeling at $9,500,000, and the legislature of Virginia subscribed $1,058,420 toward the capital stock, being two-fifths of the estimated cost of so much of the route as lay within the State. In March, 1853, the road was opened to Wheeling on a running

schedule of nineteen hours, and had cost $15,000,000, or about $40,000 per mile.

The Mohawk and Hudson River Railroad Company, forming the first link in the present New York Central and Hudson River, was constructed to run from Albany to Schenectady only, seventeen miles, and partly by stationary engines. It was authorized in 1826 and opened for traffic in 1831. The present New York Central, without its Hudson River or Harlem branches, comprises what were built as twelve independent roads. The present Boston and Albany Railroad Company originated in a project formed in 1791 by General Henry Knox, who with his associates were incorporated in 1792, with power to make a canal from Boston to the Connecticut River. The project languished until 1825, when Governor Lincoln in his message to the legislature called attention to the importance, to the agricultural and manufacturing interests of the interior, of means of transportation to Boston. It was also suggested that "railways" might be substituted for the canal. Dr. Phelps, a member of the select committee, had himself worked the Quincy railway by horse power, and advocated the new railway idea, in which he was greatly encouraged by the opinion expressed by Mr. Daniel Webster in favor of its feasibility. The Boston and Worcester Road, the first built in Massachusetts, was chartered in 1831 and completed to Westboro, thirty-four and one-half miles, in 1834, with a capital of $1,000,000.

In March, 1833, persons who were directors in the Boston and Worcester Road formed the Western Railroad Corporation, to construct a connecting road from Worcester to Springfield. The legislature passed almost unanimously, and on the recommendation of the Governor, an act allowing the State to subscribe for stock to the amount of $1,000,000.

Rival proposals, to build a direct road from Worcester to Hartford, were defeated in the legislature, as interfering with this road. In 1837 the State was further authorized to loan its credit to the extent of 80 per cent. of the capital stock of the road, or $2,100,000. And in 1839 the State credit was further loaned in scrip to the amount of $6,200,000. The object of the Boston capitalists was to secure a direct line from Boston to Albany by connecting with the Albany and West Stockbridge Road, in behalf of which the city of Albany had agreed to subscribe $650,000. This was seven years in advance of the New York connection. The extension of the New York and Harlem road to Albany was not projected until

1845. The legal limit of the Harlem had been in Westchester County at the Connecticut State line. Opposition to the Albany indorsement, by the New York merchants, ultimately obliged the Massachusetts road to assume the financial responsibility of completing its extension to Albany.

In New Jersey the Delaware and Raritan Canal Company was incorporated in 1830, also with a capital nominally of $1,000,000, but was authorized when $25,000 of capital had been paid in to build a canal between the Delaware and Raritan rivers. In the same year the Camden and Amboy Railroad and Transportation Company was incorporated with the like capital of $1,000,000, divided into shares of $10,000 each, to build a railroad from the Delaware River to Raritan Bay, with a lateral line to Bordentown, the State to have the privilege of subscribing for one-fourth of the capital, and in that case was to have two directors, or, if it subscribed for less than one-fourth, its number of directors was to be in the same proportion as the number of shares subscribed for by the State bore to the whole amount of stock. The State was also to have the right to take possession of the road as its own, at the expiration of thirty years from its completion, by paying its value, as it should be appraised by special commissioners, to be appointed equally by the State and the stockholders. The road, from its completion, was to make quarterly returns to the State, and to pay to the State in lieu of all other taxes ten cents on each passenger and fifteen cents for each ton of merchandise transported. But if the State should authorize the construction of any other road across the State from New York to Philadelphia, to commence or terminate within three miles of the commencement and termination of the Camden and Amboy Railroad, then the payment of ten cents for each passenger and fifteen cents per ton for each ton of freight should cease. In 1831 the act was so amended that the company presented to the State 1,000 shares in lieu of the proposed subscription by the State, and that the ten cents per passenger was to be paid only on passengers carried across the state from New York to Pennsylvania, and not on passengers starting or stopping in New Jersey. Thus, instead of the State aiding the construction of the road, it imposed itself as an incubus on the road, and made it the medium of sustaining in part its own State government, by imposing a tax on the transit, through New Jersey, of the citizens of other States. A similar "deal" or partnership, in which the State put in only its skill and not its capital, was made by the State with the New Jersey Railroad and Trans-

portation Company, which in 1832 was incorporated (capital $750,000) to build a railroad from New Brunswick to Jersey City. The State reserved also the privilege of becoming proprietor of the road at an appraised value.

In Pennsylvania, in 1831, a railroad from Philadelphia to Morristown, seventeen miles, with a branch to Germantown, three miles, was authorized, and soon after was built without State aid. The Cumberland Valley Railroad, authorized in April, 1831, to be built from Carlisle to Harrisburg, gave the State the right to take its property at an appraised value, and, not being able to build itself, in 1838 obtained from the legislature an act authorizing the governor to subscribe on behalf of the commonwealth for 2,000 shares at $50 per share. In 1845 the road lost its bridge over the Susquehanna, and the State, as a measure of relief, presented the stock which it held to the company, the proceeds of its sale to be used in rebuilding the bridge. In Illinois, in 1851, the Illinois Central Railroad was begun, by a national and State grant of land in aid, conditioned that the company should pay into the treasury 6 per cent. per annum on its gross earnings. The land formed the chief source of credit for the $22,000,000 which have been issued towards its construction. The proceeds of sales of the lands have paid off nearly all the bonds, and will pay off the remainder by 1890. The road was largely built with English capital. Richard Cobden, the leader of the English movement for the withdrawal of protection from the English and Irish farmers, and who was himself a cotton manufacturer, is reported to have sunk in the Illinois Central Railroad shares upward of $80,000. Prior to 1860-4 nearly every other line of American securities was deemed safer than railways. To invest in them at all was not "legitimate" business, and tended to shake the credit of the investor. Two or three successive sets of stockholders frequently lost the value of their stocks before any stock came to have a sustainable value. The profits of the railway business were almost confined to those who negotiated foreign loans upon them, and then foreclosed in behalf of these loans, on the maritime principle that the last salvor has the first lien.

60. The Era of Consolidation.—In 1851, partly in consequence of the inflow of gold from California, began a series of consolidations of continuous lines of railway, which marked the close of the first and beginning of the second railway epoch. The consolidation of lines between Albany and Buffalo into the New York Central, in 1853, began one of the great trunk lines. In

1846 the Pennsylvania Railroad Company had been formed to construct a line from Harrisburg to Pittsburg. In 1848 the cities of Pittsburg and Alleghany, and of Philadelphia, and all intermediate counties, were authorized to subscribe for stock in the road, and the State reserved the power to take the road at cost and eight per cent. interest at the end of any period of twenty years. The company was authorized to guarantee the bonds of roads in other States which might become feeders to it. In 1857, the State sold it all the public works of which it had itself become owner, including two railroads and three canals, for $9,000,000, and exempted its property in future from all taxes, except those levied for school, township, and borough purposes.

The Erie Railway, incorporated in 1832, had carried its track only from Piermont on the Hudson to Goshen in the adjoining county in 1841, being at the rate of about one mile per year. It reached Middletown in June, 1843, Port Jervis in January, 1848, Binghampton in December, 1848, Elmira in October, 1849, Corning in January, 1850, and Dunkirk, its western terminus, in May, 1851. In 1852-55 it was forming a direct connection with Jersey City, by which it became embarrassed, and from 1859 to '61 was in the hands of a receiver. This, however, was the third of the great trunk lines, to which the Baltimore and Ohio, completed in 1853, added the fourth route. The Great Western of Canada, projected in 1845, from Niagara River to Lake Huron, and completed at a cost of $25,000,000, formed, with the Michigan Central and New York Central, the first complete through route from New York to Chicago. The Grand Trunk, projected in 1852 and completed at a cost of $29,000,000 from Portland through Montreal and Toronto to Chicago, now forms the fifth trunk route. With the creation of these five trunk lines closed the second period of railway development. The period from 1859-64 was that of the transition, of the older and more eastern and central railway enterprises, from a condition of failure and insolvency to one of success and fortune-making. In the districts and counties not yet supplied, there was an ardent demand, impelled often to rashness, by the feeling that they were losing population, wealth, and progress, and being left behind in the march of prosperity by their more fortunate neighbors. To be near a railway was to get larger prices for all crops and cheaper supplies—therefore to grow rich. To be distant from railways meant burning one's corn as fuel and paying dear for supplies—hence to grow poor. Hence the desire for railways led

towns and counties to apply to legislatures everywhere, but especially in the Western States, for acts giving them leave to issue town and county bonds in aid of railways, to subscribe to shares of stock or to assess themselves for the cost of grading roads through their own limits. These acts being liberally passed, many cities, towns, and counties ran into debt. In some cases the railways desired were built. In others there was disappointment, failure, and a struggle to avoid paying the loans. This ended in many of the Western States passing constitutional provisions, prohibiting towns and counties issuing bonds or subscribing to shares of railways, just as they had previously prohibited the creation of State banks, and for like reasons. In some cases the prohibition was absolute. In others it permitted the aid to be extended where it had first been voted on at the polls.

61. Great Land Grants to Railways.—Simultaneously with this epoch of transition from failure to prosperity from 1859 to 1862, Congress had been called on to make numerous grants of lands to the States in order that the States might grant them to railways. The first of these grants by Congress was to the State of Illinois, in 1850, for the Illinois Central. Twenty-nine Acts of Congress had, in 1874,* been passed, whereby lands had been granted to sixty-eight railway enterprises.

It is estimated† that 255,000,000 acres had been granted in 1883 by the General Government and the State of Texas, and that reductions by forfeitures, etc., will still leave 185,000,000 actually conveyed. About one-half has gone into the hands of the five great corporations, as follows:—To the Central Pacific 15,260,000 acres; the Union Pacific 16,115,000 acres; the Northern Pacific 42,000,000 acres; the Atchison, Topeka, and Santa Fe 25,667,200 acres; the Texas Pacific 13,000,000 acres. Total, 112,042,000 acres. A belt eighty miles wide, extending from near Lake Superior to the Pacific Ocean, covering the very best agricultural, pasture, and timber lands, was granted to the Northern Pacific Railroad Company, which, notwithstanding the grant, failed under Jay Cooke, and continued little better than in a mendicant condition, until its second organization under Villard, or from about 1870 to 1878. A belt forty miles wide, from the Missouri River to near the Bay of San Francisco, is held by the Union and Central

*Poor's "Manual of Railroads," p. 663-664.
†Moody's "Land and Labor," 101.

Pacific Companies. The Western and Southern Pacific Companies control a line extending longtitudinally through California. The Atchison, Topeka, and Santa Fe have a belt forty miles wide, stretching through Kansas into Colorado and New Mexico, towards Arizona and Mexico. The Atlantic and Pacific Company own a belt eighty miles wide, extending across New Mexico and Arizona to near the Pacific.

For the first twelve years of the system of national aid to railways, viz., from 1850 to 1862, the grants were in all cases made by Congress to the several States and by the latter to the railway companies. On July 1st, 1862, Congress made its first grant of lands direct to corporations, in the cases of the Union and Central Pacific Companies. In the earlier grants but six sections of land per mile were granted. In the later the grant rose to forty per mile. Assuming the areas actually conveyed under these grants to be 185,000,000 acres, they amount to two-and-a-half times the total area of Great Britain and Ireland (74,137,600). The thirteen original States of the Union have 204,001,280 acres, or but little more than the quantity thus conveyed. The Empire of Austro-Hungary, the Kingdom of Italy, with Switzerland and the Netherlands, have 250,112,720 acres, and the Empire of Germany, with Italy, Portugal, Greece, and the Swiss Republic combined, have 251,163,520 acres. Meanwhile, with the war period and the policy of concentration above referred to, the great upbuilding of manufactures, cheapening of iron, and increase of travel, the railroads passed out of insolvency and became magnificent fortunes to nearly all who were interested in them. The rate of construction rose until, from having only 29,000 miles of poorly equipped road in 1860, laid mostly with iron rails, there were in 1880 112,000 miles, about one-half of which were laid with steel rails, and the manufacture of locomotives and rolling stock had become the best extant. Even our mileage of railroads laid equaled that of all other nations combined.

62. Socialistic Reaction against Railways.—No sooner had the railroad investments emerged from their period of bankruptcy into one of prosperity than several modes of popular agitation arose, based on their alleged abuses and mismanagement. Associations of farmers, calling themselves grangers, began forming in 1864-5 in the Western States, to oppose the policy of the roads in charging at a lower rate per ton per mile for long hauls of freight than for a short one. At first the legislatures attempted to fix rates of freight and fares for roads. The effort ended, how-

ever, in the designation of State Board of Railway and Warehouse Commissioners to do so; and when these had been appointed and had acted in most of the railroad States for several years, the demand for State regulation assumed the form of a demand for National regulation. Bills were introduced into Congress which proposed that, under the power conferred on that body to regulate commerce between the several States, Congress should assume a national charge of the rates for transportation, on all railways and railway systems, which by consolidation, "pooling receipts," or other contracts between the roads, had become inter-State lines. This was opposed by railway managers, partly as being impracticable in itself, for lack of foreknowledge on the part of Congress of the many exigencies required to be considered to avoid great obstructions to railway business, partly from the fact that it would leave lines which lay wholly within one State, like the New York Central and Pennsylvania Central, an unfair advantage over their competitors, the Erie and Baltimore and Ohio, which lay in several States, and would act as a stimulus to the Grand Trunk Railway of Canada, which had its termini in Chicago, Ill., and Portland, Me., but most of its route outside the Union, since Congress could pretend to no control over either of these classes of roads.

There has also developed, since 1860, a State socialism concerning railways and telegraphs, which finds expression in a desire that these works shall be owned and run by the nation at large. The extent of the feeling in favor of such a change can not be numerically stated with accuracy, but it is large when the profits of the business are large, and disappears as the railway and telegraph investments pass into a period of disaster.

As in the similar case of the socialistic desire to nationalize the lands, mines, etc., some of the socialists believe the present rights of owners should be respected, and that they should be paid for their property. Others say that, as private title to lands, railways, and all other capital, is, according to their theory, only a robbery from the beginning, to pay for nationalizing the lands and railways, by distributing among their present owners, an amount of new national bonds equal to their present value, would only be to perpetuate the crime. The nationalizing of the railways, telegraphs, and lands, by issuing national bonds in payment for them, would involve an issue of bonds to the amount of at least one-half the total wealth of the nation, or say, $25,000,000,000, being about ten times the quantity of debt incurred to defeat the Southern secession.

63. Objections to Socialistic Theories Concerning Railways.—The effective answer to the objection that railway concentration gives a few persons the power to raise freights and fares has been, that in the degree that they have been controlled by a few persons, they have reduced the rates of freight and fare. When it has been urged that the post-office illustrates, by its cheap postage system, how admirably the government is adapted to take charge of railways, it is replied that the government, by its postal department, only sorts the letters, and that the railways themselves carry them. In looking back, it is perceived that courts and legislatures set their faces honestly but crudely against railroad consolidation, and held, to the end, that any one stockholder, objecting, had the legal right to prevent the others from effecting the consolidation. But courts and legislatures, herein, served the cause of production less wisely than the railways. When one set of shippers has risen up to demand that railways be forbidden to get traffic where they can, by making such reductions in rates as will secure the traffic, even though they carry for one shipper a great distance for less than they charge another for a short one, another, and usually a more powerful class of shippers, has demanded that they be given these low rates on the long hauls. When objection has been made to the issue of an excessive quantity of stock, it has been met by the proposition that the aggregate dividends a free railway can pay are not increased by the issue of stock, since this can have no effect either to expand the earnings, or diminish the expenses of the road. Dividends can only come from the excess of earnings over expenses. A long period of agitation, for the legislative reduction of rates, has been suddenly arrested by the spectacle of millions of capital squandering itself in carrying freights and passengers for rates so low as to work a rapid impairment of the value of the stock. A recent shrinkage of one-third* in the railway values generally, both in England and America, has done much to destroy the temptation to socialistic agitation for the control of railways by the State.

Indeed, hardly had the agitation in behalf of national control of railways reached the surface, when railway owners were found tentatively encouraging a scheme which would enable them to "unload" their property, by turning it over to the government. Speculations in favor of a system of opening all railways to com-

* In 1884.

petition, between the cars, engines, locomotives, etc., of competing lines, have been indulged in by various writers. In this, as in relation to land, it seems thus far as if title in one best preserves the use to many. In land, there is no mode so effectual to exclude each from the effective use as to vest the title in all. In railways, it may also appear that private profit is the only inducement adequate to supply them in the degree which shall give society their most advantageous and abundant use.

The latest outcome of the desire that railways shall be regulated as to their charges and services by government supervision, instead of by their owners' sense of profit, is seen in the Inter-State Commerce Law. Thus far, the law has given rise to a sort of exchange, for the acquisition of information concerning the railroad business, and the removal of errors concerning possible modes of reform. As a rule, the intended reformers have furnished most of the errors needing correction, and the officers of the various railways have supplied the facts required to correct these errors.

The lovers of good and pure English, among whom the framers of the Constitution were conspicuous, can not fail to feel their teeth set on edge by the audacity with which a majority in Congress has assumed that it could cause the word "commerce" in the Constitution to include "transportation" by simply enacting it. Commerce is a change of ownership in products, and may be without change of places. Transportation is change of place, and may be without change of ownership. "Commerce between" (the people of) "different States" may imply that transportation will occur as the means of completing the exchange. It certainly does. But the meaning of the two words is as distinct as title is from locality. But a clause in the Constitution, authorizing Congress to regulate exchanges of goods between citizens of different states will doubtless continue to be construed to authorize Congress to regulate the mode of doing business by the corporations that carry the goods.

CHAPTER V.

PROFIT AND LOSS.

64. The Beginnings of Industry.—Industry, in any proper sense of the word, develops, as wealth and values do, only with civilization. Savageism is a condition of intended indolence, broken only by the exertion rendered necessary as the alternative to immediate want of food, clothing, or shelter. The savage stops work when these wants are sufficiently supplied to yield him time for slumber or debauch. Such labor as is performed in savage life consists almost solely in the toil of appropriating or reducing to possession the wild game and fish, in capturing which a day's labor may be required to successfully appropriate enough for a meal. The entire toil of savages, therefore, in hunting, fishing, digging roots, and picking berries, consists of appropriation, which is not yet differentiated from production, and largely of a form of labor to which the well-to-do and nobles of aristocratic civilization return as the highest form of sport. Title, possession, and enioyment are acquired by one act, and that an act of manual force. No anterior pains have been taken by the savage to cause his game, fish, berries, or roots to exist.

So far as industry consists of mere appropriation, man's life does not rise above that of the beast of prey, and falls below that of the agricultural ants, which keep flocks and plant rice, and below the bees who collect and store honey and practice division of labor. The principles of accumulation, and of the organization of labor through rank, force, or slavery, evidently do not originate with man, but are amply illustrated in many orders of animals. They are, therefore, instincts of the animal organization, and not human inventions, or elements of character which man can choose whether he will have or dispense with.

When the savage ceases to be content with appropriating the means of food, clothing, and shelter, which can be had by hunting, fishing, digging roots, and snaring birds, and begins to plant seeds, dig the ground, tame and herd his wild goats and sheep, and set out fruit trees, he becomes a producer, and the form of his toil changes from hunting and fishing to industry. Production and

industry, therefore, imply a degree of providence or forethought, in the production of things not immediately enjoyable; which forethought, and care for the future, are the germ of civilization.

65. Capital and Labor Part to be Partners.—Simultaneously with this beginning of industry, values or possessions divide into two kinds, viz., the enjoyable and the reproductive. The game which is shot is the enjoyable wealth. The bow and arrow used in shooting it are the reproductive. The former is exhausted by a single use, but ministers directly to human sustenance or comfort. The latter is capable of a long period of use, and only ministers indirectly to human want. The former is reward for effort, and approximates more or less closely to wages; the latter is means of production, or of appropriation, and soon begins to be called capital. The former is perishable, and must be used, if at all, immediately. The latter is persistent and may be used indefinitely. To work with the latter (reproductive wealth), to obtain the former (means of consumption), is industry. The man who owns his own implements of industry is said to be his own employer. If he does not own his own implements of industry, but is furnished them by another, and keeps the product of his industry, some return to that other is made for the loan of the implement. This return may be called rent if it be land leased, interest if it be money loaned, or profits if it be merchandise sold. If the worker with another's implements surrenders the product to the owner of the implements, the latter makes a return to the former for his work, which may be called also share, profit, or wages. If this return to the worker is proportionate to the value of the product obtained it is called share or profit. If it is irrespective of the product, but a definite payment for time and labor expended, it is called wages. The person owning the implements of industry, and employing others to work for him at wages, is called the investor, capitalist, enterpriser (*entrepreneur* Fr.) contractor, or employer. From the time the two functions of owning the means of labor, and furnishing the labor, become separated between two persons, the term industry covers the joint co-operation of the two ; the term enterprise covers the function of the contributor of the capital or means of industry, and the term labor covers the act of working for wages, hire, or share.

This division of men into those able to pay wages,* and those

* "The ultimate partners in any production may be divided into two classes, capitalists and laborers. If the distributor be the capitalist, the share of the laborer is called wages. If the distributor be the laborer, the share of the capitalist is called either interest or rent." (Hearn's "Plutology," pp. 325-7.)

compelled to work for wages, arises in a state of developed or free society, and where labor is organized by capital, irresistibly out of the fact that of two persons having an equal start, one will hoard while the other spends, and the one will make while the other loses, until it comes to pass that one is able to employ while the other is glad to be employed.

Historically, however, the relation of employer and wages-worker, when traced backward, does not find its origin in any primeval Eden of social equality, but arises gradually in most cases out of an antecedent condition, a little more despotic and enslaving, known as boss and journeyman; and this originates in one still more arbitrary known as master and servant; and this in that of lord and vassal, until we get back to liege and bondman, and thence to patrician and slave (in Rome), citizen and helot in Greece, man and chattel nearly everywhere. The inequality deepens as we ascend to more primitive eras, until we reach a condition where the owner has every power over his working man, whether of death, mutilation, or sale, that he would over his ox. The races wherein the love of personal liberty prevented this degree of subjugation remained nomadic, unorganized, or merely tribal. If the spirit of subserviency facilitated such a despotic organization of society, as it did in India, Persia, Egypt, Babylon, Greece, and Rome, then national greatness was reached, at least in part, through a subordination of individual freedom that seemed to enslave all, even those that ruled.

The process by which despotisms thus organized emerged into the condition of wages-paying nations of employers and employed, was sometimes by sudden convulsion, as in the United States (South) in 1860-65, but generally by the gradual substitution of money for force, through the increase in the volume of the former, and through the greater economy of money than of force, in securing that subordination of will and concurrence of purpose without which there can be no extensive co-operation of labor.

66. Organization of Labor by Force.—In speaking of the organization of society by force, rank, or money, it must not be supposed that, in the period of force, force itself has the same distastefulness which it comes to have in the wages period. It is in the nature of the servile to be proud of their relations to those they serve, and to be happy in feeling that their lives are linked to a more stable means of subsistence than they could find in their own efforts. The henchman was proud of his laird, the page

loved and honored his knight, and the slaves in many Southern families took intense pride in the families owning them, as do to-day the hereditary servants among aristocratic families everywhere.

The transition from the organization of labor by force, to that by wages, is sometimes made through a substitution of rewards in lieu of punishments, until these rewards, by custom, assume the form and regularity of wages. The master, in warlike periods, getting a new sword, presents his old one to his servant, who esteems the honor of wearing his master's sword as a species of knighthood. Or, in industrial periods, the master presents his servant with a house and garden, or, as in many Southern instances, even makes him ruler over other servants and foreman in his household. Thus the habit of command gradually gives way to that of purchase, and the habit of servility to the sense of independence. But presents, "tips," etc., remain to indicate the earlier system of favors or perquisites. Under the system of negro slavery in the United States, some of the slaves would get more material comforts by this system of presents, tips, and favors, than they could afterwards earn as wages. They would appear in their master's clothing, and jewelry, after it had been slightly worn. They had the advantage of medical attendance in sickness, and of an active interest in their health and welfare, which disappeared when they came to receive wages.

Stanley, in making his tour across the Dark Continent of Africa, bound himself to treat his 280 black servants, whom he employed to accompany him, kindly, to nurse and care for them in their sickness, to defend them against enemies, and "to be a father and a mother to them." The serfs and villeins of the feudal time, in entering the contract of homage or service, knelt on the ground before their protector with both hands in that of the master, and promised to be "his man, in life and limb and terrene honor." Where vassalage is thus implied on one side, and protection on the other, the wages system can hardly be said to have begun.

When the chief and his soldiers settled on the land, the exchange was at first a rent service, but gradually the element of service disappeared from rent, and it became a payment for the use of land. If the tenant's services were wanted they were at first compelled, and later employed. When society became so addicted to commerce that the laborer's time was bought and paid for like any other commodity, according to the relation which the quantity offered for sale bore to the quantity of money em-

ployers were willing to pay, various theories succeeded each other as to the proper basis on which rates of wages should be determined. In the military and knight-errantry, feudal and baronial stage, it was held that the lord should have what befitted his station, and he took pride in seeing that his servants and retainers had what was befitting their station. The principle was equality as to substantials essential to life and comfort, discrimination as to the accessories which denote rank. This truth is accurately portrayed by Shakespeare in the crowning humiliation which overwhelms King Lear when he learns that his ungrateful daughters purpose to limit him as to his retinue of servants and as to their right to make merry over their wine. Abraham and Lot part company as much for their servants' welfare as their own. When the relation of master and servant was one of social rank, it was the master's pride and part of his means of control to provide for his servant as liberally as his station would permit. Indeed, the chief source of bankruptcy consisted in attempting to provide for more domestics and attendants than the master's income could be made to cover.

In getting upon the commercial basis, the English statutes show that for centuries it was assumed to be the duty of the ruling gentry to regulate hours of labor and rates of wages, always by enacting that they should not exceed certain rates, and by forbidding unions of workmen to obtain more. In no instance, says their chief historian* † did Parliament legislate to raise rates of wages, nor to restrain conspiracies among employers to keep them down.

At last, by the absorption of the land by the wealthy, the dispossession of the poor from their customary holdings, the rise of the factory system, and the growth of the capitalists and the wages class into widely separated and unsympathetic classes, labor, or more properly labor-time, became a commodity. Economists found an average rate of wages existing in each trade, about as steady as prices of goods or food or the value of money. What fixed this rate?

67. Adam Smith on Wages.—Adam Smith made a curious mixture of the errors which attend unrestrained *a priori* reasoning, and the felicitous effects of shrewd observation, in his "Chapter VIII." on the wages of labor. He began by supposing

* Thorold Rogers' "Six Centuries of Work and Wages in England."
† Adam Smith's "Wealth of Nations," by McCullough, p. 30.

an "original state of things which precedes both the appropriation of land and the accumulation of stock" (capital), when he said "the whole produce of labor belongs to the laborer." From this beginning he proceeded to treat labor as the one producer, and landlords and profit-makers as the sources, not of production, but only of deduction from what labor produced.

This beginning overlooks the historical fact that in most races, if not in all, history opens with the fact that the laborer is the first property to be appropriated—slavery preceding often the appropriation of the land, and the ownership of labor being the first form of circulating capital. This was wholly the rule among the Egyptians, Greeks, and Romans, and largely so among the Asiatic races. If there was any early golden age among the Germans and Saxons when labor was not owned, it disappeared before Roman conquests and feudal institutions.

Dr. Smith then says: "It seldom happens that the person who tills the ground has wherewithal to maintain himself until he reaps the harvest. His maintenance is generally advanced to him from the stock (capital) of a master, the farmer who employs him, and who would have no interest to employ him unless he was to share in the produce of his labor, or unless his stock (capital) was to be replaced to him with a profit. This profit makes a second deduction from the produce of the labor which is employed upon land."*

Dr. Smith gets at the nugget of the truth which he seems determined to ignore. He assumes that his laborer is a destitute person, without land, implements to work with, or the means to subsist him until the harvest is reaped. In fact, his so-called laborer is not a laborer at all, but a helpless, suffering image of destitution, lacking the land to labor upon, the food to sustain himself, or the implements to work with. Is he in this condition a producer? Certainly not. All that he can produce is famine. The landlord who, in this stage of his fate, advances him land to work upon, and the farmer who gives him means and subsistence while he labors, are the true producers of his work. In this case, and in all in which the laborer is wholly destitute, he has not the initiative in production, but must be initiated from without, as truly as must the labor of an ox, mule, or engine.

Only that can be said to be the producer which has the power *per se* to initiate production. Since, of the three forces at work,

* Rent of the land on which he labors being the first.

the landlord, the farmer (or capitalist), and the laborer, the second is the one who initiates production by hiring the land and employing the labor ; and since, as Dr. Smith perceives, the motive to him is profit, evidently *Profit*, though it may be the last element to be counted out, into the hand of its recipient, when the product is sold, is the first to inspire the production.

It is Profit* that hires the land and agrees to pay the rent. Profit fences it, drains it, manures it, plants and cultivates it, and markets its product. Profit picks up the destitute pauper from the highway and converts him from a hungry appetite, ready for crime itself, unless he can be fed, into a laborer co-operating in producing commodities for which there is some demand. For the destitute man, as a mere walking appetite, there may have been so little demand that parishes would compete to crowd him on each other, and emigration committees would woo him to leave the country. Fagins would tempt him, judges would gladly banish or serenely hang him, and poets would write rhymes upon him as perhaps

> One more unfortunate,
> Weary of breath,
> Rashly importunate,
> Gone to his death.

In the economic sense, he is converted from a commodity for which there is no demand, into a worker, co-operating to make society wealthy, by the profit-maker, who has the initiative in industry, by being possessed of the capital to sustain him, the enterprise to obtain a job for him, and the courage to risk the loss of a capital, all of which he might convert into the means of his own enjoyment without employing any body. Under these cir-

---

* McCullough's note to "Wealth of Nations," p. 159, says: "It is plain, therefore, that the prosperity of a country is to be measured by the rate of profit which her capital yields, or (for it is the same thing) by her capacity of employing capital and labor with advantage, and not by the actual amount of her capital or the number of her people. The capital of Holland is undoubtedly much larger, compared with her population, than that of the United States ; though as the latter is able to employ her capital with far greater advantage than the former, every one is ready to admit that she is also by far the most prosperous. 'The progressive state' is justly characterized by Dr. Smith as being in reality the cheerful and hearty state to all the different orders of the society ; the stationary is dull, the declining melancholy. But as this progressive state is mainly a consequence of a comparatively high rate of profit, he ought in consistency to have maintained the doctrine that the rate of profit realized in different employments is the best standard by which to judge of their advantageousness."

Mr. McCullough is here thinking of economic advantage, not of intellectual, moral, or social.

cumstances, is it fair to say with Dr. Smith that this impersonation of destitution is the producer, and that the profit-maker and the landlord are the vampires that merely suck a part of his blood? Is it not absolutely true that the profit-maker is the sole producer, and that rent is a first deduction from profit's share of the product? Raw materials are a second deduction, implements and plant are a third, wages of labor are a fourth, and so on?

Dr. Smith, however, saw clearly that, between the employers and workmen there goes on a system of profit-sharing, in which the true source of rise in wages is rise in profits. He says,* "It is not in the richest countries, but in the most thriving, *or those which are growing rich the fastest*, that the wages of labor are the highest." Again, on p. 40, he says, "The rise and fall in the profits of stock (capital) depend upon the same causes with the rise and fall in the wages of labor, the increasing or declining state of the wealth of society." Again, on p. 37, "The liberal reward of labor, therefore, as it is the effect of increasing wealth, so it is the cause of increasing population." P. 33, "The liberal reward of labor, as it is the necessary effect, so it is the natural symptom of increasing national wealth."

The term used here, "rapid increase of national wealth," is identical in meaning with high rate of profit on capital.

Repeatedly, also, Dr. Smith explains that the high rate of profits induces a higher rate of wages through its effect to cause a competition among employers for the hire of workmen.

Dr. Smith had thus laid the ground-work for making the wages of labor depend upon the profits of capital, when he drops into the error expressed in the following (p. 41): "In a thriving town, the people who have great stocks (capitals) to employ, frequently can not get the number of workmen they want, and therefore bid against one another, in order to get as many as they can, which raises the wages of labor and lowers the profits of stock. In the remote parts of the country there is frequently not stock sufficient to employ all the people, who therefore bid against one another in order to get employment, which lowers the wages of labor and raises the profits of stock."

Capitalists do not bid against each other for more workmen merely because they have large amounts of unemployed capital on hand. They let their capital lie idle until there is such a margin between cost of raw materials and wages added on one

* "Wealth of Nations," by Mr. McCullough, p. 31.

side, and the price they will get for the finished product, as presents a fair show of profit. This is illustrated in Chapter XV. of this work, in the cotton famine in Lancashire, in 1864, produced by the cessation of supplies of American cotton. The raw cotton went up so suddenly as to be worth more per pound than the cotton goods, thus eliminating the possibility of profit in the manufacture. The mill-owners had abundance of capital, but they did not disperse it in wages after the margin for profit was gone. They shut down and waited until, by the consumption of the stocks of cotton goods on hand, the prices of the goods climbed up far enough above the price of cotton and wages to leave the margin of profit. The instant prices showed the margin the mills resumed.

Nor is it always true that in remote parts of the country people bid against each other actively for employment, and so make wages low. They oftener withdraw from seeking employment at the hands of others, live upon nature, or within themselves, by those barbarous pursuits, hunting, fishing, and trapping, which consist only in appropriation, but engender independence. Capital is scarce and insecure in such places, and rates of interest are high because its investments are precarious, not because they are profitable, or rather none but the most profitable investments will overcome the deterrent effect of the precariousness of the venture. Wages may in like circumstances be high where they are paid at all, because the people are so accustomed to living without them that unless paid high wages they decline to work. While this may not be the universal rule, it is therefore the frequent fact that in remote localities the profits of capital are high, so far as capital consents to engage, and the wages of labor are high, so far as men consent to work, but both the men and the capital (what there is) are largely idle.

By means of this partial error Dr. Smith was led into the generalization that "as wages rise profits fall," which was subsequently elaborated by Ricardo. This is true in the same short sense as it is true that when the clouds appear the sun ceases to shine. In fact, behind the clouds the sun is always shining, and the density of the clouds becomes the most powerful measure, as well as effect, of the intensity of the sun's shining. So it is rising profits alone that can ever be the potential cause of rising wages. Let that cause actually cease, and the effect would be like that of the extinguishment of the sun upon the clouds. They could never reappear. But so long as that cause is active, a temporary

rise in wages may seem, for a brief time, to extinguish profits, just as a temporary condensation of moisture may seem to extinguish the sun's light. That which seems to be extinguished is in reality the All-Powerful Cause of the existence of that which seems to extinguish it.

68. Equivalence of Exchange in the Wages Contract.—The political economist, lifting the veil from society at work, brings to light a wholly involuntary system, not merely of co-operation but of social government, far more pervading in its influence, and searching in its power, than the exterior State, whose framework exists in constitutions, and whose dignitaries fill the various offices of the visible commonwealth. This social plexus, this network of self-interest, this labyrinth of production and exchange, commands our service, not merely at occasional intervals or through official substitutes, but every moment and as to every person. In all our pursuit of wealth we obey it. In all business it reigns. Its capitals are where capital is. Its prophets are where profit is. We may adopt infinite resolutions to the effect that all men are equal, but, in the very act of adopting them, we appoint a ruler to preside at their adoption, and apply to capital to print them, which request it grants through the obedience it is able to exact from labor.

Is this dominance economically necessary? Is it a product of natural law? Political economy answers Yes; socialist critics answer No. Nine-tenths of that organization of industry, or association of men in co-operative production, which distinguishes civilization from barbarism, and industry from anarchy, is effected by the payment of wages. To discuss the cause of rates of wages, therefore, is to discuss the justice of the economic order of society.

Wages are the compromise between the highest sum, which capitalists will pay rather than forego their chance of profit, and the lowest sum laborers will accept, rather than forego their chance of employment. If there is a margin between these two sums, if, for instance, the employer would pay $1 per day rather than forego his hope of profit from the employment, and the wage-worker would accept 60 cents a day rather than be out of work, then either will yield to the other, according to the degree in which he regards it necessary to him to secure the profit or the wage. All this, however, relates merely to the motives of the dicker. What is it that, getting down to the economic bedrock of the bargain, determines whether the employer will lose a profit unless he

employs a workman, and, *vice versa*, whether the workman will lose a wage unless he works at the rate offered? Supposing both parties to judge of their own interests with accuracy, it will be the fact that the product, of their co-operation in industry, will sell for enough to yield the employer a return on his capital better than he could get elsewhere, after paying the laborer a wage better than he could get elsewhere. Here are two equations, each of which takes in a vast market of transactions. They are made between two classes of persons, between whom some things are equal and some things are unequal. Among the things in which they are equal is that the portion of the capital of the employer, which will hire a man, is of just as much value to the man whom it employs, as that man's work is to his employer. For where, of two co-operative agents, neither can act without the other, both are equal, and being equal in efficiency should have equal pay.

Again, a dollar to a rich man is exactly equal to a dollar to a poor man, in the sense that if a rich man renders a service worth a dollar, his right to the dollar is as good, in ethics and equity, as that of a poor man. If, therefore, he brings to the poor man a co-operative agent, viz. capital, with which the poor man is enabled to earn a dollar which he otherwise could not, he renders an equal service to that which the poor man renders to him, if the poor man so uses this capital as to cause it to earn a dollar for the capitalist, through capital which would otherwise earn less.

So if the two parties were merely fishermen, one of whom had furnished boat, lines, and bait, but could not fish himself, while the other fished, but had neither boat, lines, nor bait of his own, the aid of each being equally necessary as that of the other, it would be equitable that the fish product should be divided equally between them, no matter how many other men the owner of the boat, lines, and bait might employ in the same way. Here we strike a principle of equity as between man and man. This is, that the amount of capital which employs a man's labor, and the amount of human labor which gives employment to this same amount of capital, should have an equal share of the joint product, if they are, as usually they must be, equally necessary to the joint result. If this is a sophism, I am not able to discern its fallacy.

Now, in every business, there is an aggregate capital, and an aggregate labor force. Suppose the capital to be $60,000 and the labor force 50 men. The unit of capital that employs each man is $1,200. For 50 men putting up $1,200 each could employ them-

selves; virtually, therefore, the wage employment is a loan by the employer to each of his workmen of $1,200 with which to effect a work of production. If the mode of production is ill-advised, or the product is not in sufficient demand to pay a return of more than say $1,000 a year, while the wages of the workmen, the rent, and other costs are $25,000 a year, then the employer will sink his entire capital in two years, while the workmen will get their wages. But the economic assumption is in accordance with the average course of industry, which requires that it should be socially in demand. Suppose it pays a return of fifty per cent. on the capital, or a profit of $25,000 after paying wages. This will attract capital from every quarter, until the rate of return is reduced to the average rate which capital yields in other similar enterprises. When it has reached this stable rate of gross return, what proportion of the gross return must go to capital and what to labor to make the transaction just? Should not that unit of capital which employs a man, and the man himself, share alike? True, one man may own twenty units of capital, and in that way get a return equal to that of twenty men. What matter, if the service he renders to each of the twenty exactly equals the service each renders to him? His aggregate services to the twenty must be equal to the aggregate of the services of the twenty to him. Hence, if he furnishes the capital which employs twenty, or five thousand, he should receive an aggregate return equal to that of the whole number of persons to each of whom he reciprocates an equal service. In this way only can there be equality, and equity, in each of his exchanges of service for service.

69. Instances of Equality of Division.—A case which was among the first to suggest that there may be a natural tendency in the aggregate capital, to work on equal shares with the aggregate labor, employed in any branch of production, was that of the fifty-four railways which report annually to the railway commissioners of Illinois. They embrace a cost, for construction and equipment, of $1,251,792,029.74, and have a par capital of $2,800,000,000. The number of persons who own shares, or hold loans, against them is not known, and is not perhaps capable of being made definitely known, as it is liable to hourly changes. The number of persons employed, from president down to switchmen is 156,007. The companies report that they pay for the use of their capital in all its forms, *i.e.*, in

Dividends and interest, ...	$81,720,265.53
And in wages and salaries, ...	81,936,170.81

Total gross income or joint earnings of labor and capital, ...	$163,656,436.34
Excess of labor's share over capital's share, . .	$215,905.29

Variation from equality in division, one-eighth of one per cent.

Mr. Edward Bates Dorsey, in a paper read before the American Society of Civil Engineers, states that the total gross earnings of the railways of the United Kingdom are $355,311,350, of which the "operating expenses" absorb $186,842,810, and the total net earnings are $168,468,540, thus making the former absorb fifty-three per cent. and the latter forty-seven per cent. I have not the data by which to determine that the operating expenses are identical with wages and salaries, or whether as to some small part they may not cover purchases of commodities which are really additions to the fixed or circulating capital of the roads. If in operating expenses are included any rents, or purchases for renewal of the fixed capital, as of engines, etc., or payments for accidents and losses, then the true "wages and salaries" account would be diminished by so much.

The unit of capital required to employ one man in the railway business in the United States is $8,000. That sum, invested in railways earns the same return as the man it employs, within one-eighth of one per cent. per annum, so far as the railways reporting to the Illinois commissioners are concerned, and these are about one-fourth of all the railways in the country. This seems to indicate an involuntary tendency on the part of railway enterprises, employing labor and capital at the cheapest competitive rates at which they can buy both in the market, to divide equally between labor and capital as wholes, paying the same sum to the unit of capital which renders the employment of one man possible, as they pay to that man whose employment renders the use of the unit of capital possible. On referring to the census, some materials are supplied for inferring the terms of division of the product between the aggregate labor and aggregate capitals there indicated. In doing so no occasion exists to use the figures, relating to capital, which numerous critics have successfully impeached. It makes no difference, with reference to this calculation, whether the principal capital of an establishment includes borrowed capital or not, or good will, or whether deduction is made for loans or debts, or, in short, whether the capital of any or all establishments is set down as $10 or $10,000,000.

Simply take the value of the gross product of the various industries, *i.e.*, what the product sells for in the market. The figures of the census, for this, have not been improved upon or attacked. From this, deduct the cost of raw materials used as per census, which also is as yet unimpeached. This difference between cost of raw materials, and value of finished product, is, of course, the increment of value which arises in the particular process of manufacture under consideration. This is, in the long run, and making no consideration of losses, the fund which is to be divided between capital and wages. In manufactures the wages are paid before the product could be sold. In railroading the product, transportation, is sold a month or so before the wages are paid, but in searching for the ratio of economic distribution of the joint product, between capital and labor, the time when the wages are paid is immaterial. Wages are usually paid before the employer knows whether his product will reimburse him, and sometimes it does not reimburse him. But this is true also of his rent, his plant, and every other element which undergoes economic distribution, and is therefore also immaterial in any effort to trace out the principles on which capital and labor usually divide, in order to give rise to existing rates of profit and wages.

From the joint product above obtained, by deducting cost of raw materials from value of finished product, deduct still further the aggregate wages paid as given by the census. This quantity is unimpeached by the criticisms on the census, as it does not involve the average amount of wages paid per man, the ratio of the total amount to the time worked, or any disputed fact. The residue left by this last deduction would be the amount which capital would at least receive for distribution, or reimbursement, and for profits. It would be the sole fund from which capital would repair or extend its plant, pay for losses in bad years or by bad debts, pay for wear and tear of plant and implements, rent, insurance, etc. The net sum, remaining to the employer after covering all disbursements, would be profits.

It must be borne in mind also that the labor bill, referred to in the census, is not to be mistaken for the entire labor bill involved in the product, which includes also the labor bills involved in the construction of plant and raw materials. It is the labor bill involved in the last process only of manufacture, viz., that of which the census professes to be an enumeration.

By this method it appears that the total manufacturing industries of the United States, in 1880, paid, as

Wages to labor, ...	$ 947,952,745
Capital's share for distribution, including profits, ...	1,023,801,837
Excess of capital's share over labor's, . .	76,848,092
Excess over half,	38,424,046

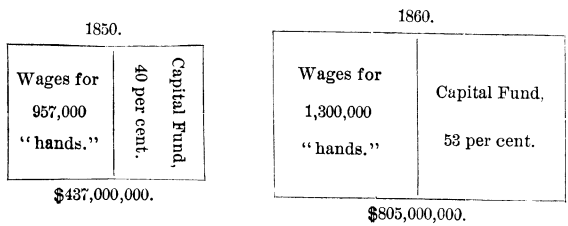
Variation from equality of division of the joint product between capital and labor, four per cent. in favor of capital. As the rate at which capital extends its plant in manufactures, a service equally beneficial to labor as to capital, is not far from four per cent. per annum, the rate of effective division, or of actual beneficial equality, is about as perfect in manufactures as in railroading.

In the chapter on labor other illustrations of this rule or coincidence appear. These instances are presented tentatively, and as showing a tendency, rather than as demonstrating a law which, in the present state of research, can be clearly defined.* Some pro-

* Many facts bearing on this general point seem to confirm this ratio.

Mr. Mallock (in "Property and Progress," p. 202) figures the gross income or joint earnings of the British people (including Ireland) at between £1,300,000,000 and £1,200,000,000 by the census of 1881. Of this sum the wages-class received £625,000,000 definitely, leaving the aggregate receipts of the class having incomes exceeding £150 at about £577,000,000. A small share of these incomes may also in the economic sense be properly wages, which would require a deduction. But doubtless a much larger share of incomes were concealed or underrated. So a substantial equality is indicated throughout Great Britain between the earnings of capital on one side and labor on the other. It is indicative of equality in a rude but substantial way that in the United States the deposits in savings banks, which here represent very closely the uninvested receipts of the aggregate wages-class, about equal the total deposits in National, State, and private banks, which are the uninvested receipts of the capital class.

The apt diagrams used in this connection by Mr. Grunlund in setting forth the division between the wages-fund and the capital-fund are marred only by Mr. Grunlund's deceptive term "surplus." Mr. Grunlund's allowance of 5 per cent. for wear and tear of capital is quite inadequate. With these qualifications he presents the system of division of the gross earnings of the manufacturing industries of the United States in four successive census years as follows :



cesses of exchange, for instance, may illustrate a far greater power in capital than in labor, and one which will content itself with only the lion's share of the joint product.

1870.

Wages for 2,000,000 "hands."	Capital Fund, 53 per cent.

$1,310,000,000.

1880.

Wages for 2,739,000 "hands."	Capital Fund, 48 1-3 per cent.

$1,834,000,000.

It is made evident, by the facts collected concerning rents and interest in England, that the normal share of the gross produce of land, hired for industrial purposes, which goes for rent, is one-fourth, or more frequently 21 per cent., and that the normal share of gross produce which goes for interest, when the whole capital is borrowed, is another fourth. As capital's share is two-fourths of the gross product, if we suppose the manufacturer hires his factory and pays rent, and hires his whole capital and pays interest, it is evident that a line directly through the so-called "surplus" of Mr. Grunlund would devote half of it to rent and the other half to interest, and leave the enterpriser no "surplus" whatever.

Rae's "Contemporary Socialism," p. 399, says: "In Arthur Young's 'Political Arithmetic,' published in 1779 (Part ii., pages 27, 31), he estimated the gross agricultural produce of England (exclusive of Wales) at £72,826,827, and the gross agricultural rental at £19,200,000, or 21 per cent., very nearly one-fourth of the produce. To come down nearer our own time, McCulloch estimated the gross agricultural produce of England and Wales in 1842-3 to have been £141,606,857, and the gross agricultural rental £37,795,905, or 26 per cent. of the produce. ("Statistical Account of the British Em-

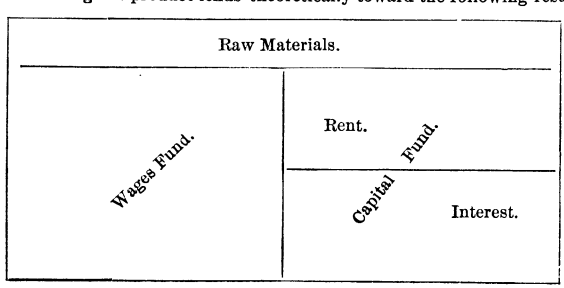
Adam Smith thought that agricultural rent was "seldom less than a fourth and frequently more than a third of the whole produce" (Book ii. Ch. v.), but that "in the progress of improvement

pire, 3d Edn., p. 553.) The gross agricultural produce of the United Kingdom is now two hundred and seventy millions sterling, and the gross agricultural rental seventy millions. Mr. Mulhall, indeed, estimates it at only fifty-eight millions, but at seventy millions it would be as nearly as possible 26 per cent., curiously enough the same figure as in 1843 and in 1779, and almost the same as in 1689." These facts show that rent tends to take a fourth part of the gross product of such industries as are carried on on the rented surface, or that the enterpriser who hires all his plant pays out one-half the capital share for rent.

As to rates of interest, it is easy, by comparison, to see that they usually range at one-half the profits earned by a capital invested by its owner in active business. Says Roscher:

"At the end of the last century English farmers expected 10 per cent. profit on their capital, *i. e.*, after paying for rent, wages, implements, and raw materials." As current rates of interest were 5 per cent., it would follow that if the farmer borrowed all his capital he would work at the halves with his usurer. The principle of division between usurer and farmer is the same as between farmer and landlord. (A. Young, "View of the Agriculture of Suffolk," 179, 128.) Senior is of opinion that in England to-day (1830) industrial enterprises of £100,000 yield a profit of less than 10 per cent. a year; those of £40,000 at least 12½ per cent.; those of from £10,000 to £20,000 15 per cent.; smaller ones 20 per cent., and even more. He mentions fruit hucksters who earned over 20 per cent. a day, *i. e.*, over 7,000 per cent. a year ("Outlines," 203 seq.) In Manchester manufacturers, according to the same authority, turn over their capital twice a year at 5 per cent. (each turn), retail dealers, three times a year at 3½ per cent. (Ibid. 143.) Torrens, "The Budget," (1844) 108, designates 7 per cent. as the minimum profit which would induce an English capitalist to engage in an enterprise of his own." (Note to Am. Edn. of Roscher, Pol. Econ., vol. ii., p. 151).

By profit in the last illustration I assume is meant the residue after paying rent, wages, cost of raw materials, and every other charge except that of interest on the capital invested. The profit of per cent. therefore would be the regular rate of interest, viz., 5 per cent., and the regular rate of commissions on managing small investments, viz. 2½ per cent. Each of the above cited rates of profit is twice the current rates of interest in transactions of similar dimensions. For it is well known that in the same circumstances in which profits on small capitals rise to 20, 30 or 40 per cent. interest on small loans rises to 10, 15 and 20 per cent. Hence interest ranges at a fourth of the gross proceeds of the industry on which the capital is loaned. The mode of distribution of the price of the gross product tends theoretically toward the following result:



it increases in proportion to the extent, but diminishes in proportion to the produce of land" (B. ii. Ch. iii.) thus leaving it at not more than one-fourth.

Adam Smith saw this ratio of division between capital and

But this is equivalent to saying that the distribution tends constantly to obliterate profits, to one who neither owns his plant nor his capital. This is true. It is exceedingly rarely that such an one can continuously maintain himself in any business. It is almost an axiom that a profit-maker, to succeed as such, must own either his fixed capital, or his circulating capital, or both. Without either, he is a man of straw, an adventurer, and is likely to travel out of one bankruptcy into another. Hence, in practice, profits proper, *i. e.*, considered apart from both rent of land and remuneration to capital, seem almost to narrow themselves down to a reward for getting the start of every body; for making money in new or shrewd modes not known to either money-lenders generally or to landlords generally. Of course the profit-maker nas four funds out of which to save a profit if he can, viz.: in buying raw materials, in hiring labor, in hiring his plant, and in borrowing his capital. He has four more out of which to create a new gain, viz.: in discovering new channels of demand, in inventing new processes of supply, in widening his market, and in cheapening his means of reaching it. But out of all these there is none which has the fixity which belongs to rates of wages, of rent, or of interest. Hence, it is singular that Adam Smith should have begun to reason concerning distribution by assuming an ordinary rate of profit on capital as a first fact. Profits, meaning a compensation for capital in excess of rates of interest, are so fluctuating as to be always extraordinary. For if profits perform the same function which a rudder of a ship performs, viz.: that of steering the course of industry, the rudder must be constantly changing, even when the course of the vessel is straight. Hence, of two commercial houses in business side by side, one may be making heavy profits, one may be losing heavily, and both may be mistaken as to their actual condition, or whence the profits or losses will come.

It may seem that the proportion above claimed for the share of capital is widely in conflict with that arrived at by Mr. Edward Atkinson,* who expresses the opinion that "what portion" of the total product of a nation's industry "constitutes the average share of the capitalist at the present time can not be substantially proved. In a normal year under normal conditions," Mr. Atkinson is "of the profound conviction that not exceeding 10 per cent. can be set aside as either rent, interest, profit, or savings;" and that nine-tenths constitutes the share of the laborer, which by subdivision becomes expressed in personal wages." In saying that "not exceeding 10 per cent. can be set aside as *either* rent, interest, profit, *or* savings" Mr. Atkinson first awards 10 per cent. to each of these, making 40 per cent. for all, but by assuming that nine-tenths of the product would be left for wages he reconstructs his 10 per cent. so as to make it cover all instead of each of the four. This may be a slip of the pen, but in view of the actual facts it seems much like a fatal leap in the thought. Among fully one-half the population of the United States, and over three-fourths of the area, say in all parts south of Cincinnati and west of Toledo, 10 per cent. is the current and average rate of interest alone on all loans except the largest of those made in cities. Most real estate rented for productive purposes draws from 8 to 10 per cent. rent, even in Eastern cities, and frequently 20 per cent. Most corporate shares are rated at the principal sum on which they will pay 20 per cent. instead of 10, thus showing that capital values itself for investment at 20 per cent., not 10. Thus a corporation having a par capital of $200,000 and earning $200,000 a year will sell its shares in the aggregate at about $1,000,000, or the sum on which it pays 20 per cent. Twenty per cent., therefore, is capital's own valuation on itself when invested productively. Again, the ratio of the annual prod-

* Essay, "What Makes the Rate of Wages," p. 27.

labor and states it very comprehensively. (Book ii. Ch. iii.) He says : "That part, of the annual produce of the land and labor of any country, which replaces a capital, never is immediately employed to maintain any but productive hands. It pays the wages of productive labor only."

"When it (the annual produce) first comes either from the ground or from the hands of the productive laborers it naturally divides itself into two parts. One of them, and frequently the largest, is in the first place destined for replacing a capital (*i. e.*, re-imbursing for wages paid) or for renewing the provisions, materials, and finished work, which had been withdrawn from a capital ; the other for constituting a revenue, either to the owner of this capital, as the profit of his stock (or interest), or to some other person as the rent of his land. Of the produce of a great manufactory, in the same manner, one part, and that always the largest, replaces the capital of the undertaker of the work ; the other pays his profit, and thus constitutes a revenue to the owner of this capital."

Dr. Smith also describes interest as ruling at one-half the cur-

---

uct of the nation's industry to its principal capital is 25 per cent., showing a tendency to earn that amount through the joint efforts of capital and labor. Again, Mulhall and other statisticians estimate the annual national savings alone, or the increase of wealth that goes over to another year, at upwards of $800,000,000, or at least 12 per cent. Suppose A to desire a property worth $20,000 for manufacturing purposes. As rents go he would begin by paying $2,000 for it as rent. If he should form a stock company the capitalized value of the shares in the money market would be that sum on which his earnings would pay from 15 to 20 per cent. dividends. How many times would he turn his entire capital over in a year? In a daily newspaper at least three times. In other branches of manufactures nearly as often. The total value of the establishment will be the principal on which the profits of these three turnings over will be 20 per cent. The average of business establishments apply nearly 10 per cent. per annum, sooner or later, to the extension of their business or to private residences of their owners. Either is an embodiment of profit. Contemplate the enormous manufacture of private residences constantly going on as a means of embodying the profits of business. All this does not come out of a 10 per cent. on the money invested.

Mr. Atkinson seems to have in mind, moreover, the net profit of the capitalist appropriable to personal and family expenditure, after paying cost of erection and annual wear and tear of plant and implements, insurance, losses of bad years, and the like. The distributive share which capital must disburse in other ways than in payment of wages and raw materials is another matter. The latter forms the object of my pursuit.

It is to be regretted that neither Smith, Ricardo, Mill, Carey, Cairnes, MacLeod, nor any other writer, so far as I have met with their writings, attempts to fix the ratio of the distributive share of capital by an appeal to data sufficiently extensive to be called scientific. Hence any attempt to reduce the hitherto unrestrained course of assumption to a basis of fact may give rise to the charge of empiricism. This we must endure, so that the course of the combat may in time be shifted from the empirical to the scientific basis.

rent rates of profit. (Book i. Ch. x.) He had thus in mind, exactly the division outlined in this chapter, viz., one-half to reimburse capital (which he defines as all going to pay wages of productive labor) and the other half to interest (one-fourth) and rent (one-fourth).

Three facts in our American rates of wages tend to confirm this view. These are:

1. The standard of wages in agriculture goes far toward fixing the standard of wages in manufactures. In agriculture the extent to which the farm labor contracts to work for half the product, as against the land and the capital jointly, both of which get the other half, shows that in farming the real rate of wages is adjusted upon the principle of giving half the product to labor and half to capital and land jointly. A presumption would arise that the same must be true in manufactures, mining, railroading, and merchandising, simply as an effect of the natural tendency toward an equation of rates of wages (other things being equal) in all occupations.

2. The practice, in manufactures, of arranging the wages of workmen on a sliding scale, whereby the workman's compensation is proportionate to the price of the products, prevails in certain branches of the iron manufacture, and indicates, so far as it goes, that wages in manufactures generally are proportionate to product.

3. When colored laborers in the Southern States were the subjects of property, the price which attached to the laborer as an object of purchase would naturally be adjusted according to the amount of capital on which his earnings in excess of the cost of subsisting him would pay a better profit than would be obtained on the same capital in other forms of industry, other things being equal.

Agricultural laborers brought from $800 to $1,200. In free agricultural labor at the same period the amount of capital required to work in partnership with a laborer, *i.e.*, the amount of capital which would, when invested in farming, land, and implements draw the same return which the laborer would draw, was from $800 to $1,200. Of course the slave became himself capital, to the amount of the capital he exempted his owner from the necessity of acquiring, in order to use his labor. The free laborer works in partnership with this same equivalent of capital, invested in land and implements and takes half the product.

Doubtless in a shrewdly conducted commercial business like that of the late A. T. Stewart, the share of capital, and even per-

haps the annual net profits of the proprietor, might amount to more than the clerk hire and labor bills. But I have heard it remarked, by practical merchants, that what a clerk or salesman makes in his last years of clerking and the profits of his first years of trade, are so nearly on a level as seldom to result in any sudden change in his condition.

70. Productive Industry Is a Form of Social Government.—Though I have thus far treated the wages contract as if labor were the thing sold by the worker to his employer, it will help to clear away many deceptions, which have misled some to their injury, if I point out that, as a rule, the essence of the wage contract is not in the sale of labor but of obedience, sovereignty, or will, so as to produce not so much force, as flow or harmony of action, which can only come from the subordination of many wills to a single will. A man may put any amount of time and vigorous toil into his work, but if it is done disobediently to his employer's will, he is entitled to no pay legally or morally. It is universally understood that what the employer buys, is not so much, or so specifically, muscular effort, as the right to direct the effort, whatever its kind, whether it be muscular or nervous, bodily or mental. The porter who stands at the door of a residence, hotel, or restaurant, and opens the door, perhaps electrically by touching a spring, whenever he sees a guest about to enter, can not be said to labor, for no more physical effort is required to do this than to do nothing. But he earns his wages and is a productive laborer. Why? Because his employer's interests prosper better, or his employer's pleasure is subserved more truly, by impressing every person who enters with a sense of politeness pervading the establishment than if the visitor is required to ring and wait, or is left to open the door himself. In this case, therefore, the wages are earned, not by labor, but by that subserviency, which shall stand for, and represent, the intended politeness, or taste, or style, or dignity of the master.

Subordination, therefore, is the one thing bought and paid for in the wages contract. "They also serve who only stand and wait." On the other hand, insubordination destroys utterly the working value of the most capable, skillful, or experienced worker. It is, in the wages contracts, the chief and most unpardonable of all viciousness. An insubordinate, or self-inspired worker, can not be depended on, in any capacity which requires organization or co-operation with others on a large scale, and must either become his own employer or must degenerate into pauperism.

Uninstructed persons, of insubordinate or truculent tempers, often pride themselves upon what they style their independence, meaning thereby their readiness to quarrel or argue with employers, and thereby to bring on themselves discharge from employment.

They should understand that there is no baseness in the sort of obedience, which is called for and paid for as the essence of the wages contract, for the reason that only in this way can industry be steered in the direction of demand, which is the function which employers subserve in industry.

The employer's business is to seek and yield to the public demand. His phrase to his workmen is, "I must please the public; you must please me." It is through the subserviency of the employer to the public, followed up by the subserviency of each employé to his or her own employer, that the entire force of employés may be held to the work of satisfying a public want. This is organization in industry. It is the only practicable way in which men and women ordinarily can render those services to their fellow-men sufficient to call for that return service at the hands of others known as "a comfortable living."

For, as a rule, each person in business gains his living by the service he renders to strangers in the economic sense, *i. e.*, to persons to whom he is under no obligations, and very likely does not know, and who, in turn, do not know him. The engineer on a railway really serves the passengers and the owners of the freight which are entrusted to be drawn by his engine. Both these classes are strangers to him. The medium of enabling him to serve these strangers is his wage contract with the railroad company, which, in this case, is the middleman effecting an exchange of the engineer's time and that of others, working together in the use of the stockholders' capital, *i. e.*, the rolling stock, in order to sell, to the freight owners and passengers, a joint product of capital and labor, viz., transportation. But on analysis it is not really capital and labor that effect the transportation, but it is command and obedience. For, no matter how much capital is put up, if commands are not obeyed, the railway is converted instantly from a means of transportation into a mere means of wholesale slaughter. The labor of transportation in this case, *i.e.*, the physical force which draws the train, is not put forth by the engineer but wholly by his engine. The supervision of the engineer is directed wholly to making the engine obey the time-table. This may be called labor on his part; but it may be

merely a labor of watching—the end of which is obedience, pure and simple, but the alternative of which is destruction, sudden and terrific. The organization of labor in society, therefore, is effected by means of a system of subserviency and obedience, whereby every industrial act, every sale of a service or a commodity, and every performance of a service, or a contract, is part in a chain of causation of which the supply of all is the ultimate effect, and the demand of all is the primary moving power and stimulus. The steering and piloting is all done to make profits. The manual and methodized labor is all done to earn wages. But these terms are, in the final analysis, interchangeable. Wages are always the profits a man wins, by investing his time and selling his will, judgment, and obedience, in the manner which he draws his wages for, rather than any other. And profits are the wages a man gets for risking his means in a given investment, and abstaining from enjoying the principal while it is so invested. Hence there is an ultimate sense in which wages are profits and profits are wages. Just as we have seen in Chapter I., there is an ultimate sense in which capital performs labor, or labor is capital.

71. Do the Indispensable Means of Labor Earn a Share of the Product?—While Karl Marx nowhere presents any facts showing what the ratio of the wages share to the capital share really is, he constantly assumes that it is equal.* But by assuming also that the wage laborer is the sole producer of value, that the capitalist's contribution of the means of work is in no way necessary, and should not be permitted to reap any return, since these means are themselves the result of previous robbery and not of saving; and that the wages paid are in all cases only the cost of sustenance of the laborer, with just enough added to enable him to propagate his class without increase or diminution; that mere exchanges of commodities do not create values, hence that the functions of the capitalist, enterpriser, and trader are all needless, Karl Marx is able, through the necromancy of bald assumption, to convert a division between two equal partners, in the ratio in which they contribute to production, into a spoliation or "exploitation" of labor,† by capital, to the ex-

* "Kapital," vol. i., page 175.

† The choice of the word "exploitation" by the socialists is particularly happy, since it is in fact truthful when accurately understood. Exploitation does not mean "spoliation," but simply creating or causing exploits or achievements where otherwise there would be inaction. It implies that capital energizes labor, but this implication is ignored. Its perversion into a term signifying robbery is part of the general system of "exploitation" of economic terms carried on by socialist writers.

tent of 100 per cent. on what labor produces. He constantly styles the cost of the sustenance of the laborer his natural wages, under the iron law of Ricardo and Torrens, and assumes that he gets no more, ignoring the fact that most capitalists start in life as wage laborers, and begin their capitals through the savings from their wages. All the value commodities have, at any time, over the cost of sustenance of the labor which produces them, he denominates "surplus value," exploitation, or robbery. Thus that form of economic "criticism" which begins by assuming that lack of the means to work with, which is what we call labor-power, creates all values, speedily ends in that form of war on society and industry known as Anarchism or Thuggism.

The first truth to be embraced by one who would really comprehend the *plexus*, or interlocking of labor with capital, in the present organization of industry, is that all reproductive capital—the machinery with which the profit-maker works, is in use by the workers themselves, and is their means of earning wages.

In his "Chapters on Socialism," Mr. Mill, who was himself in many senses an avowed socialist, says :

"Another point on which there is much misapprehension on the part of socialists, as well as of trades unionists and other partisans of labor against capital, relates to the proportion in which the produce of the country is really shared, and the amount of what is actually *diverted from those who produce it*—"

Mr. Mill here falls into the very socialistic error which he is attempting to rebuke, by assuming that all that wage laborers do not get is so much "diverted from those who produce it"—

—"*to enrich other persons.* When, for instance, a capitalist invests £20,000 in his business, and draws from it an income of, suppose, £2,000 a year, the common impression is, as if he were the beneficial owner both of the £20,000 and of the £2,000, while the laborers own nothing but their wages. The truth, however, is that he only obtains the £2,000, on the condition of applying no part of the £20,000 to his own use."

And of loaning its use in some form to labor, *i. e.*, to relative destitution—

He has the legal control over it, and might squander it if he chose ; but if he did he would not have the £2,000 a year also. For all personal purposes, they have the capital, and he has the profits, which it only yields to him on condition that the capital itself is employed in satisfying, not his own wants, but those of laborers.

A truer statement would be that the capitalist has the power to steer industry in the direction of what he deems to be the profit, which is always that of the effective social demand. For this power he takes the profits, and incurs the losses, incident to the employment of reproductive capital. Operative workers have

the loan of his capital for their use, as the condition, or means, or partnership by aid of which they can produce, and without the aid of which they would loaf in idleness. And the customers of the business or purchasers of the product of their joint labors, who are nearly equivalent to society at large, have its services, as they do those of labor, by paying for its product.

72. Does the Risk of Loss Give Valid Title to the Profit ?—Many socialists concede that, in the present organization of labor, the rule of the profit-maker over the wages-earner is temporarily just, so long as it is made necessary, by the lack of ownership, by the wage-earner, of the job, implements, means of subsistence and capital, from which to make up to the wage-earners and to others, the ultimate loss of wealth which will result to society if industry is steered toward the production of unprofitable products.

But they desire us to believe that it is not intrinsically and economically just, and will not be perpetual. In short, they hold, with Mr. Mill, that "it rests upon the arbitrary institutions and customs of men, and not on irreversible economic law."

If it be possible for society to evolve into such a condition that all men will own their own jobs, implements, means of subsistence, and capital, from which to make up losses, the social problem would have been solved by the elimination of the wages class, and by the fact that none but capitalists would remain. But the prediction of such a state of things falls within the domain of prophecy, presumption, or quackery—of the first if true, of the second if undemonstrable, and of the third if false. Economists can only say that in the kind of world we live in, the reign of the enterprisers and profit-makers over the wage earners must continue, so long as any class of men need to work in order to live, and have not the means to work with.

Henry George declares that creation alone gives title. We accept this definition for the profit-maker's title to his profits. When ten thousand men lie idle, who would gladly do their share toward building a railway, if some profit-maker will but come and incur the risk of loss implied in the furnishing the means with which to build the road, but who are powerless and starving because he does not come, can it be said that it is this inertia of destitution that alone builds the road ? The profit-maker comes. Instantly they spring to their feet and commence building. Why? Because they have sold themselves, their muscles and their time, to him for a day. What for ? So that he might out of their

idleness create labor—out of their incoherence create co-operation —out of their babel create unity—out of their destitution and incapacity create wealth. He does create all these, buys them by buying the laborer's time, and the right to command his obedient will. Having created them, shall he not own what he has created? If so, then, for the purposes of the day's work, he is owner, and the laborer is implement. He is Mind, Force, Energy, and the laborer is cart-horse and harrow, mere clay in the hands of the potter. How, then, shall the clay say to the potter, "I am the producer?" The universal conscience of man, and even the very definitions laid down by socialists, alike agree that when the *profit-maker*, by incurring a risk of loss, where others will not, leads forward the industrial host into enterprises in which others dare not, and so creates labor itself where others would let it rust, and the result proves that he has met and satisfied a social demand which others did not see, he shall have a valid title to the profit because he created it, as well as a valid command over the labor which he evokes, because he creates that also.

The moral and legal right of the profit-maker is to rule industry, subject to its power to rule him. By this we mean it is his right to select the kind of work on which he shall enter or continue solely with reference to whether he sees a profit in it, and to refuse or stop when he sees no profit, to prescribe the hours on which he will consent to run his industry, subject, of course, to such opposing forces as society may bring to bear. It is his right to get all the effective service out of his working force which he is willing to buy and pay for, as it will naturally devolve on his working force to get all the wages out of him which they can make the services rendered bear. If he exploits their labor, so do they exploit his capital. But he becomes one power, and their aggregate becomes another, in an equal contest. Each unit of capital, or sum necessary to employ a man, acquires an equality in exchange as against that man. Its indispensability in production is worth as much as his. Its capacity to earn equals his. Its capacity to bless or curse mankind, to do good or harm, equals his, because, if he declines to labor on its terms, it can usually find one who will. What the laborer produces, therefore, by laboring, is not the commodity which figures as the joint product of labor and capital. A laborer is the *sole* producer, only, of a diversion to himself of wages which would otherwise go to another laborer. In himself alone, he is exactly as productive as any other commod-

ity, for that, by its sale, produces a diversion of a price which would otherwise have gone for another commodity ; so does he sell a commodity and another takes its place. Discharge a laborer and another takes his place. Hence Karl Marx's phrase, surplus value—meaning the value a laborer produces above the wages he receives—defines a modicum of moonshine. He produces his wages, or rather their diversion from another to himself—no more and no less. All that remains above his wages is the share which accrues to the profit-maker, who is the sole producer of the commodity, process, or result which commands both the wages and the profit.

If a profit-maker produces that which society does not want, he is punished for it by loss of capital; if he continues in his course, by bankruptcy. He is as severely dominated by society as his workmen are by him. That which he produces without adequate demand, he must sell for as much less than it cost him to produce it, as society has less need of it than of other things which might have been produced by the same effort.

Having no power to compel society to pay him more for his product than it pleases, as society pleases to pay him less than its cost, the difference is his loss, penalty, and punishment for ignorantly assuming to lead social industry into any other form of work, or to any greater cost for a particular form of work, than that for which there was most effective social demand. It is upon condition of sustaining all these losses, that the profit-maker enjoys his counter-privilege, of collecting, as profits, the excess of price which demand puts upon his product, over its cost of production. "Nothing ventured, nothing had." It is the courage to risk this loss that constitutes enterprise and creates all industry. Hence the title of profit-maker rests on his utility as a creator, and is valid.

73. Loss as Well as Profit an Economic Force.—The fear of loss brings often as much suffering to the successful as the dread of want brings to the poor. All men have a nearly equal capacity for painful and pleasurable emotion, and the tendencies to emotion of either kind are a nearly constant quantity. The portion of a rich man's wealth which he deems secure, and the portion of a poor man's living which becomes habit, fall out of the emotional range of their natures, and cease to afford pleasure or pain. These spring from the periphery of uncertainty which surrounds the habitual, and in this sphere the sweets of pleasure and the pangs of pain live on, as in a tree the sap circulates only between the

growing roots below and the growing leaves above, leaving the interior channels of fixed habit to decay and hollow death. Man living at his points of growth only, which are his points of utility to himself and his fellows, finds a nearly equal chance to keep green and fresh those emotions which are the ultimate and final wealth of his nature, whether he be poor or rich.

All values evanesce rapidly. All wealth is constantly losing its value. Bankrupts discovered, settled, and cleared America. But the bankruptcy came after the service. They that founded its cities, built its railways, inaugurated its inventions, also became bankrupt. Columbus found in Spain a prison. Hudson met in the northern seas a dagger. The wife and children of Goodyear were buried as paupers by charity. Even Prof. Morse was lifted out of destitution by private friendship.

Arkwright, too, by his talent for organization principally, like Siemens and Edison, attained to princely wealth, while Hargreaves, a greater inventive genius than Arkwright, from a technical point of view, had to bear all the hardships of extreme poverty.*

An experienced Frenchman, Godard, estimates that in France, of one hundred industrial enterprises attempted or begun, twenty fail altogether before they have so much as taken root ; that from fifty to sixty vegetate for a time in continual danger of failing altogether, and that at farthest ten succeed well, but scarcely with an enduring success. (Enquete Commerciale de 1834, ii. 233.)

Pioneers of enterprises in which fortunes ultimately arise often die beggars. Losses are seldom summarized or collected. They represent only the vacancies left by explosions, the nothing which takes the place of something. We all hear of Cyrus W. Field, for he laid the cable which was rescued from oblivion by profit. We do not hear of those who sought to perform the same service by a telegraph line, through Alaska and Russia, from New York to London. The success of the cable was their failure.

The reasons why the mass of mankind are wage-workers is not that they have always lacked the means to become profit-makers. It is that they once possessed them, played at the game, and lost. For when they lose they die, or fall back into the ranks of wage-workers. Very few men work for wages that do not at some time attain as large capitals as those with which Vanderbilt began to row his passengers from Staten Island to New York, or with

---

* Note to Roscher, Am. Edn. p. 140.

which Peter Cooper started his coffee-stand on the sidewalk, or with which Bennett began the *Herald.*

To-day the deposits, nearly all of which belong to wage-workers, in the savings banks of the United States represent a capital of about $1,200,000,000, which is a sum equal to the entire aggregate deposits of the business men in the State and National banks combined. The average deposit to each person is $360. Every such person is a wage-worker from preference, because he fears the risks of business.

I am aware that the wage-worker points to the lock-outs, strikes, commercial crises, times when he is out of work, or works for an insolvent employer who does not pay him, and insists that he, too, shares in the losses of industry due to its being turned into channels where its product is not demanded. In the cases of lock-outs and strikes, the wage-worker is paid while he works, but his work stops. There is no loss of pay for work actually performed, consequently no wealth passes out of him to compensate society for a mal-employment of labor. On the contrary, he may have grown richer by that very mal-employment of labor by which society would have grown poorer, but for the fact that the whole loss to society is paid for out of his employer's capital.

In commercial crises labor and capital both stand still. Labor contributes no value which is capable of compensating society for a loss. But the capitalist who has invested $50,000,000 in building a railroad worth $5,000,000 has sustained a net loss of $45,000,000, which, if society in the aggregate were the capitalist, would have to be borne by society at large. And if thousands of small capitalists were the owners, it would send ruin into as many families.

In 1883 to 1885 railway shares in the United States shrank in value by one-third, without, it is believed, causing poverty to be felt in a single household or the discharge from employment of a single workman.

The only case in which the wages-worker makes a loss which makes him a sharer in the punishment due to an unprofitable guidance of industry is when he works for an employer in creating reproductive wealth and his employer so fails as not to pay him. In this case the wages-worker "adventures," or risks, his labor intentionally on his employer's responsibility only, but virtually on the success of the enterprise. Nearly everywhere he is given a lien which guards against his loss if the improvement ever attains value. To make the adventure fair, his wages ought

to be enough higher than he could earn elsewhere to cover this risk.

As a rule, and in the large, the profit-maker relieves society of all pecuniary loss by the unprofitable misdirection of labor in the production of that for which there is less than the highest current demand. He exempts society from all waste of labor by paying the penalty of such waste himself.

Who can estimate the value of the vast saving to society which accrues, and the vastly more rapid growth of wealth which results, and the prodigiously greater amount of mental service rendered by each part of society to every other, under a system which, by shoving over all uneconomic and unprofitable effort on those who cause it, resolutely holds the great mass of workers to effort that may be perhaps distasteful and uncongenial to nearly every person engaged in it, but which, by the fact that it pays a profit, is inexorably proved to be the most demanded of any service that could be rendered. The instinct which draws society toward profit is analogous to the attraction in nature which draws plants toward light.

74. The Rate of Profit.—Prof. H. D. MacLeod, with great force and acuteness, points out* that the rate of profit varies, directly, as the excess of the price of the product above the cost of production, and inversely, as the time in which the profit is made. Hence, if the capital advanced be £100 and the profit £20, the rate of profit depends on the time within which it is made. If it be made in a year, the rate of profit is 20 per cent. per annum; if in a month, it is 240 per cent. per annum; if in a week, it is 1,040 per cent. per annum; if in a day, it is 7300 per cent. per annum. Thus the same profit may, if made in a different length of time, be a very different rate of profit. The profit is, in all cases, the difference between cost of production and price of product. The rate of profit is, in all cases, the percentage of the return earned, to the capital invested, within a given time. The rate of profit, therefore, as between different industries, depends largely on the proportion of the capital which can be brought into active use, or, as the phrase is, turned over, and the time required to turn it over, as well as on the percentage of the gross return to the principal. In American farming at least two-thirds of the capital is in the land, which is not turned over in the economic sense except as it rises or falls in value, and this rise or fall is not

* "Principles of Econ. Phil.," vol. ii., p. 41.

effectively realized unless it is sold. The farming implements, though capital, make no separate profit on their own turn over, as they decline in value each year. The live stock and crops, and the cut of grass and forest, are the yearly portion of capital turned over, and these usually only from once to twice a year. Most manufacturing concerns, however, turn out a product from once to five times their capital, or virtually turn over their capital as many times each year, and most large banks loan from four to six times their capital.

It may be asked, if the rate of profit is so much greater in banking and manufacturing than in farming,* why does not farming capital go into banking and manufacturing until the rate is equalized? The answer is that the risks of farming, where the farmer owns his farm, are reduced to the minimum, and are lower probably than in any other occupation. This at least is true of farming in the Eastern States. Where, however, as in the Western States, farming is marked by an increased addiction to a single crop, produced by an application of a large capital to a very large area of land, the risks increase, losses are frequent, bankruptcy almost as frequently overtakes the farmer as the merchant, and as great fortunes and as high a rate of profit is made in farming as in any other occupation.

Adam Smith† supposed that there is an "ordinary rate of profit" on capital sufficient to meet the losses to which it is exposed, and leave a certain other "ordinary rate of clear profit," or business would not be carried on. This was because he began with labor as the efficient agent, instead of with enterprise—with matter instead of with mind. In fact, there is no ordinary rate of profits, and no two investments of capital, in any country, that agree either in the volume or the rate of their profits. To allege

---

* MacLeod (Vol. ii, p. 61) regards the opposite view, as held by Adam Smith ("Wealth of Nations," Bk. ii., Ch. v.) as most extraordinary, and contrary to the plainest facts of history. Dr. Smith says: "No equal capital puts in motion a greater quantity of productive labor than that of the farmer . . . no equal quantity of productive labor employed in manufactures can ever occasion so great a reproduction. In them nature does nothing, man does all; and the reproduction must always be in proportion to the strength of the agents that occasion it. The capital employed in agriculture, therefore, not only puts in motion a greater quantity of productive labor than an equal quantity employed in manufactures, but in proportion, too, to the quantity of productive labor which it employs, it adds a much greater value to the annual produce of the land and labor of the country, to the real wealth and revenue of its inhabitants. Of all the ways in which a capital can be employed, it is by far the most advantageous to society."

† "Wealth of Nations," by McCulloch, p. 41.

such an agreement would impeach their balance sheet as effectually as an alleged Chinese census is impeached when two large provinces are given exactly the same area and the same population. What ordinarily takes place is not that those who lose their capitals have them made up to them by succeeding profits, but that they are eliminated as profit-makers and fall back into the ranks of wage-workers. They go at something else. There is an ordinary transfer of the capitals of losers into the hands of winners, and in this way capital is steered out of losing investments into profitable investments.

Adam Smith was nearer the truth when he estimated that half the average rate of profit would be the ordinary rate of interest.* For the principle upon which we have supposed the division to be made between the profit-maker and the wages-worker would also apply between the borrower of capital and the lender. A man will borrow capital to work with when the profit he can make by borrowing it, or the residue he will have left after paying interest on it, amounts to a better compensation, for his care and risk in superintending the work he will set on foot with it, than any other use he can make of his time and risk at the same cost.

If his own capital enable him to employ ten men, but by borrowing as much more he can employ thirty men, the increased capital increasing the efficiency or the losses of his establishment by more than its own quantity, he may obtain on the labor of the thirty men a gross sum out of the product twice as large as the wages of the thirty men, and he may only get a product half as large as the wages he pays. If he and the lender of the money meet at the point where each is equally indispensable to the other, he furnishing the lender with an investment he lacks, and the lender furnishing him with a profit he lacks, to make the exchange equal he should divide equally.

Profits are so much more unstable than interest, and losses to the profit-maker, are so much more frequent than to the money lender, that any comparison between the two is necessarily one of instability with stability.

The same consideration applies to any comparison of rates of profit with rates of rent on land.

Adam Smith, starting with the proposition that rates of profit on capital would conform to a certain standard, assumed that

---

* Book i., Ch. ix., McCullough's Edn., p. 41.

capital would migrate from the better to the worse soils as fast as it could earn in the new location this ordinary rate of profit, and would leave behind it for the landlord in the form of rent whatever excess it might earn above this ordinary rate of profit. The highest rates of profit, however, are sometimes made where the highest rents are paid, and sometimes where no rents are paid. The London and provincial banks of England quite generally make dividends of twenty to twenty-five per cent., though their rents are as high as any known, since their business demands as good locations.

Whaling-ships and privateers also may make high rates of profit and pay no rent at all. Perhaps no vessels can properly be said to pay a rent. Nor does capital show any disposition to seek out a landlord for vessels which pay a high profit, and pay to him the difference between what it can earn in the use of those vessels and what it can earn by sailing the meanest hulks afloat.

That there is a very uniform ratio between rates of interest and rates of rent is familiar to all. But this arises partly because rates of rent are always estimated, not upon the actual cost of land and buildings, but upon a capitalized sum which is virtually arrived at by calculating the principal sum on which the actual rents will pay the interest at current interest rates, together with taxes, insurance, and a moderate profit for the greater trouble of real estate investments. Hence the ordinary so-called rent-rate is, in fact, not a rent-rate in any original sense, *i. e.*, it is not a sum computable from facts relating to the land, its area, cost of improvements, or the like, but the rent is itself the original factor, and from this the value of land is arrived at as the principal on which the rent will pay interest.*

A good deal of effort has been expended to prove what Mr. Mill calls "the tendency of profits to a minimum" and what Henry C. Carey styles "the diminution in the value of capital as indicated by the diminution in the share of its product which is given for its use by those who, unable to purchase, desire to hire it." As relates to each particular enterprise in which profits are won, this is more than true, indeed, it is inadequate to the truth. Profits may be said to begin at unlimited figures, and to recede rapidly until, as profits proper, they totally disappear. Each particular mode of investment of capital invites a competition from

* Adam Smith (Book ii., Ch. iv.) says "the ordinary market price of land depends everywhere on the ordinary market rate of interest."

others, a rise of wages, rent, and interest, until these swallow up all the returns. If this were not so, profit would not be the migratory force which pioneers the way to new fields, processes, and modes.

But when this doctrine, of the tendency of profits toward elimination, is transferred from a law of each individual investment of capital, and is stated as a "tendency of profits to fall as society advances," as Mr. Mill plainly puts it, and as Dr. Carey and Mr. Atkinson seem to, it is a palpable absurdity which would be at war with the potential progress of society if it could be true, and in conflict with daily observation. Capital in mining, at the outbreak of the California and Australian mining epoch, made such profits that percentages were lost sight of. Bonanza farming has made profits of five or six hundred per cent. per annum. Divide A. T. Stewart's fortune of $80,000,000 over fifty years, and estimate it as a "profit" on the capital of $4,000, with which he started. It would be $1,600,000 a year, or an average of four hundred times his first capital each year. So of other large fortunes. All observation indicates that as large profits are arising in the new industries as the old gave rise to when they were new, or, to use the old adage, there are "always as good fish left in the sea as ever were caught out."

CHAPTER VI.

CAPITAL.

75. Definitions.—Capital is that portion of wealth employed in distributing or producing wealth or commodities. The distribution, consumption, and production of commodities is to be carefully distinguished from the distribution, consumption, or production of the wealth, or the values, at any time embodied in those commodities.

When corn is sent from Dakota to Massachusetts, Pennsylvania, and Liverpool, commodities are distributed. The agents in the distribution of commodities are trade, commerce, and transportation. When the price which the corn brings is divided between the transporter, the middleman, the merchant, the banker, the landowner, the land-farmer, the laborer, the tax-collector, the school-teacher, and all others who get any share of it or whose services aid in its production, that process is called the distribution of wealth. The two movements are therefore in opposite directions and of opposite kinds. One is production or taking to market—satisfying want. The other is payment—getting home with the price—being rewarded. The former is visible, material, easily understood. The latter is subtle, evasive, and concealed. In the process the prices received for the corn must, on the average, pay the freight of the transporter, the interest of the banker who loaned money to the farmer to help him produce the corn, the commissions of the middleman, the taxes paid on the land, the teacher who taught the farmer's children, and perhaps the preacher who preached to them. But the most obvious things to be paid for are the use of the land, the interest on the capital, the reward to the enterprise, and the wages of the labor that produced the corn.

If the wealth were not distributed among the producers, the commodities, in which it is embodied, would not be produced. But producing the commodity is not identical with producing the wealth it embodies. Corn, when reaped in Dakota, is, as a commodity in the ordinary sense, as completely produced as it will

ever be. This ordinary sense is not a very true sense, since things are commodities only as they commode people, and as there is no body in Dakota who wants that portion of the corn which is surplus, it is much less a commodity there than it will be in New York. The word commodity is a word of value, and the value in the corn will keep increasing as it approaches nearer to those consumers of whose esteem and need the value is the measure.

Since capital is the portion of wealth which is devoted first to bringing the corn into existence as corn (viz., land, plows, cultivators, money for seed, etc.), and then to enhancing its value by forwarding it to those who value it, it may be said that the function of capital is to create labor, commodities, and values, as labor, commodities, and values, whenever employed in certain ways, become capital. Capital is etymologically that which leads or commands or has the headship in industry, from *caput*, head. Economically it is exactly what it is etymologically. It would never have seemed to be any thing else, had not a desire grown up to define words in a way to win votes, instead of with a view to scientific precision. As capital has no vote, while those whose labor it creates have, it was deemed courteous to call attention only to the fact that labor creates capital, without calling counter-attention to its complement, that capital creates labor. The circle is the same as in the case of the egg and the living animal. "All life from the egg" is no truer than "every egg from life." *Omnium vivum ex ovo* finds its complement in *omnium ovum ex vivo.* So of capital and labor, each hatches the other.

Nor is the consumption of commodities the same as the consumption of wealth. When an egg is hatched out into a chicken a commodity is consumed, for no egg exists, and a new commodity is produced in its stead. But there has been no consumption of wealth, as in each stage of the process value was increasing. So in drawing a train of cars coal is burned, but this, though a consumption of a commodity, is no more a consumption of wealth than is a laborer's sweat, for, as in human labor more than the value of the labor, and generally twice as much, passes into the commodity, so in the transportation of corn to market by rail more than twice the value of the commodities consumed in effecting the transportation are embodied in the corn, *i.e.* the purchaser in New York or Liverpool values it higher as it draws nearer to him by more than the cost of the fuel and wages, freight, interest, rent, and profits incurred in bringing it.

When consumption of commodities is part of the means of enhancing value, it is reproductive consumption, and is a phase of productive energy. Nor does destruction of wealth always imply destruction of the commodity. When things are made at a loss commodities are created but wealth diminishes.

Capital is frequently designated as fixed or circulating. Fixed capital implies all reproductive wealth that can be used again and again in its function without change of efficiency or change of ownership. Fuel and food are circulating capital, because in a single use they lose their efficiency as fuel and food. Money is circulating capital, as to the person who pays and receives it, because capable of but one use, for the time, by one person. But the unexportable stock of money, at any time existing in a country, may be viewed as fixed capital as to the aggregate society of that country, because its social efficiency is greater the oftener it changes hands.*

76. Distribution of Wealth Precedes and Causes Production.—If we are right in the foregoing definitions, it will be evident that, as it is the consumption of commodities that creates the effective demand for them, so it is the distribution of wealth that causes the production of commodities; for men co-operate in producing commodities, only as they are presently or efficiently incited to co-operate, by being paid to co-operate. Hence it is that distribution precedes and causes production, viz., rent must be paid, raw materials must be bought, men must be hired, machinery must be collected, subsistence for the men must be had and maintained, a contract for a job must be agreed upon, all before production can begin. But each of these acts involves a distribution or paying out of wealth, viz., rent of plant, interest on capital, wages of labor, and profits on raw materials. It is because distribution precedes production that only those who have the power to distribute wealth can produce it in person and originally. All who have no capital are mere instruments of production. They can neither dictate its course, its mode, nor its

* Mr. Moody ("Land and Labor," p. 179) objects to the statement that circulating capital, *i.e.*, money, to the amount of $270,000,000 was converted into fixed capital in 1882 by the expenditure of that sum in building railroads, because, as he says, the money is still circulating. This is true as to society, but not true as to those who paid out the money. They no longer have it for circulation. If we assume that had they not built the railroads they would have paid it for the same labor to raise wheat, and that the added wheat would have been worth it, there would have been $270,000,000 more wheat and less railroads where now there is that value more in railroads and less in wheat.

terms. If they seek to do so through strikes or labor contests, it is only by distributing wealth out of their own funds that they can secure the degree of co-operation necessary to produce even a strike. Hence, even in producing an obstruction to industry, distribution precedes production. Hence, too, it is hopeless to attempt to comprehend the phenomena of social industry except by beginning at the distribution, not of commodities, but of wealth. And it is chiefly because Adam Smith, Ricardo, Malthus, and Mill have begun at labor and production (meaning by labor the condition of unaided destitution, and by production whatever labor does) that they have founded not only their own school of *laissez faire* economists, which make unaided labor the sole producer, but indirectly and by reflex action they have also founded the German, English, and American school of social anarchists, who propose that unaided labor, having produced all the wealth, shall have it all.

77. Is Economic Distribution Just?—The unequal distribution of wealth has been confessed to be unjust and unnecessary by the mass of mankind, by many statesmen, and by most economists, without discussion or examination. The more disposed the mind is to regard undirected and empty-handed labor as transacting the whole business of life, a disposition which in many minds rises into an infatuation easily mistaken for benevolence, the more plaintive will be its outcry against one man having more than another. Thus, Adam Smith,* after speaking of servants, laborers, and workmen of different kinds as "making up the far greater part of every great political society," says "it is but equity, besides, that they who feed, clothe, and lodge the whole body of the people should have such a share of the produce of their own labor as to be themselves tolerably well fed, clothed, and lodged."

The answer to this is, it is but equity that they who obtain the initiative in all industry, who set all labor in motion at their own risk, and provide it with its work, implements, and subsistence, and market its product, should be recognized by a professional economist as having done something toward the creation of labor, instead of being maligned as the crafty purloiners of what they have had no hand in producing. If it were true that "servants, laborers, and (wages) workmen" do "feed, clothe, and lodge the whole body of the people," then Adam Smith would not be teach-

* McCulloch's "Wealth of Nations," p. 36.

ing sound equity in saying that the robbers should give up enough to feed and clothe the producers comfortably. An honest conscienced world will spurn with scorn any such mealy-mouthed compromise with felony as Smith proposes. Karl Marx would be right in saying the profit-makers should give up all, which they did not produce, to the last red cent. Political economy must prove society to be in accord with exact and minute justice, and with true, profound, far-reaching philanthropy, as well as with natural law, before it can become the satisfactory science of society. We believe the philanthropy of economic science to be the major key in social harmony, and the philanthropy of impulse and sentiment to be excellent within proper limits, but a minor and subordinate key to human welfare. It is the rains and the rivers of natural economic law that chiefly bless mankind, not the levees, stop gaps, umbrellas, dams, and make-shifts, which enable us to fight the rains and rivers at times. So the principles of economic law which govern social industry claim scientific recognition as the commanding forces which contribute to the world's comfort, without in any way denying that when these fail, or are too crude or brutal, finer and more delicate impulses summon us to works of impulsive charity. So in the Hebrew economy, they who plowed and sowed the fields with grain reaped, as the major rule, but the widow and fatherless, who neither sowed nor reaped, must also be allowed to glean after the reapers. This was the minor rule. These two rules reflect the relation which business bears to charity at all times. But when industry is so misinterpreted as to become robbery, charity, by the same token, becomes insult. Hence it is that even the right apprehension of the true nature and mission of the altruistic sentiments becomes impossible until the proper exercise of the egoistic is justified and defended. Society denies the right of industry to be kind or generous, until what is characterized as industry is first shown to be inherently just and humane. That can not be done on the bases assumed by Smith and Mill.

Mr. Mill says* that, "while the laws and conditions of the production of wealth partake of the qualities of physical truths," in which there is "nothing optional or arbitrary," it "is not so with the distribution of wealth. That is a matter of human institution solely. . . . The distribution of wealth depends on the laws and customs of society."

* "Political Enonomy," vol. ii.

It is amazing that Mr. Mill should think that, if legislatures chose to enact it, wealth and capital could be maintained in a state of constant equal distribution among all persons, or that it could, perchance, be distributed in such unequal portions that honesty, piety, learning, complexion, personal beauty, or popularity, should get whatever excess over the share which would befall the lack of these qualities a legislature should see fit to enact. But he distinctly affirms that wealth-distribution depends on parliamentary and judge-made law, and on such customs as society may choose to enact for itself. "The rules by which it is determined," he says, "are what the opinions and feelings of the ruling portion of the community make them." But how comes there to be "a ruling portion of the community?" Why should one portion of the community be ruled by another? Only because one portion has wealth and the other is in poverty. If Crusoe has a boat, fishing-tackle, and bait, and Friday has none, then Crusoe is capital, and Friday is labor, *i. e.*, Crusoe has got in his power the results of work already done, Friday has got a hungry body which is willing to work if enabled to do so. Work done commands the mere willingness to work. This is the rule of capital over labor. It is plenty commanding destitution, distribution commanding production.

Mr. Mill holds that wealth is unequally distributed because those who have it distribute it unequally, between themselves and those who haven't it. That inequality whereby a portion of society rules, is due to the fact that the portion which rules rules unequally. Inequality causes the persons, laws, and customs of society to be unequal. Mr. Mill's cause, is the consequence of its own effect, and his effect produces its cause!

78. Dispersion of Capital Is a Mode of Destroying It.—Wealth being a power, and all power being powerless when resisted by an equal power, it follows that to equalize wealth, as between those who are to wield its power and those over whom it is to be exercised, is to destroy it. Wealth does not consist in means, but in inequality of means. Portions of wealth co-operating, as among shareholders, to control labor, strengthen each other. But two portions of wealth, each seeking to command the service of the possessor of the other, paralyze each other. Hence, between two persons of equal powers in all respects, and of equal wealth, the phenomenon of one employing the other to do any thing whatever, would be an absurdity. The

story is told of Mr. Stephen Girard, of Philadelphia, that, being one day at the market purchasing provisions for his family, a pompous fellow of great pretense, but of small means, mistook the plainly clad millionaire for a laborer or porter.

"Here, my good fellow," said he to Girard patronizingly, "don't lose your time moon-gazing, but shoulder this basket of mine, and earn a shilling by carrying it home for me. I live just beyond the residence of that tight old fellow, Stephen Girard. If you don't know me, you may know him. Will you go?"

"Certainly," said Girard. Shouldering the man's basket, he followed the stranger to his door and received his fee.

"By-the-way," said his customer, "I may have occasion to use you again; have you a card with you?"

"I have no card," replied the rich man; "but you can probably find me by inquiring. My name is Stephen Girard."

Here the absurdity of a poor man employing a rich one to render a menial service is so palpable, and the willingness of the millionaire to render it becomes so humiliating, that only the sheerest combination of effrontery and ignorance on one side, and of quiet wit and equanimity on the other, could effect the climax. Essentially, the rule is universal that only the relatively poor are open to employment, and only those having more means can employ them. Out of this inequality grows the only power that wealth possesses, as one can very soon learn by undertaking to employ one much richer than himself to render any physical service.

The same point may be tested in another way. Divide the whole wealth of the people of the United States, $54,000,000,000, among the whole people equally; $54,000,000,000 divided among 54,000,000 persons gives to each person $1,000. No one has more, no one less. Of this sum $600 is in land, and $400 is in personal property. If the land were divided according to area, instead of value, each one would have 43 acres. If a person now has either of these sums, what can he do with them? He can use them only for consumption, or for storing value temporarily against immediate want. But neither consumable values nor stored values are capital. Hence, as capital, they have ceased to exist. But no person having so small a sum could safely invest it in any railway, bank, factory, municipal debt, or like security. No corporate enterprise could be permanently conducted which consisted of so many small shareholders. It would be a mob, not a directorate. The New York Central Railway would have 200,000

shareholders, or as many as there are adult males in New York city. Hence the great concerns which now constitute our capital enterprises, and which employ probably three-fourths of the labor of Great Britain, France, Germany, and America, could have no existence. For, as large forces of workmen practice a division of labor which small ones can not, so large capitals can effect a subdivision of their potency in the form of credit to many more persons, functions, and places than a small one. This increase in the potency of capital, through credit, magnifies much more rapidly than the capital. (A penniless adventurer who caused it to be believed that he had come over from England with five millions to loan, but had not, in fact, the means of paying a single hack hire, was enabled on this false credit to open a banking house in Wall Street, receive deposits, buy a country estate, horses and carriages, entertain largely, etc. His credit worked in all ways and directions.)

To subdivide capital is, in this sense, to destroy it. But without these banks, manufactories, shipping lines, mining enterprises, all commercial interchange and association among men, in the degree adequate to maintain existing industries and civilization, would be not only impeded but paralyzed. Equality would be annihilation. What the socialist describes as justice would be famine. The radically equalized mob would surrender to military force, in order that through an abject abnegation of its liberties it might begin again in social slavery, and thence emerge and return to its present condition of reciprocal helpfulness and mutual freedom.

79. How Distribution of Wealth Attends Its Cumulation, and Getting Rich Is Doing Good.—Is there any economic law which causes men to create and distribute the commodities of which others have need, and in so doing to distribute the price of the commodity back among its producers with that perfect equity which shall reward each according to his economic merit, but, if he fail of economic merit, shall still supply him according to his need?

Why should Chinamen interest themselves in carrying bales of tea, or raw silk, on their backs over the mountains, so that we may enjoy them? It is because the wage of his day's service comes to him at sundown, indirectly and through various bankers in advance, but ultimately, and very straightly, from those who will wear his silk and drink his tea. But for this distribution of wages to him, he would not be producing, but probably

fighting or hunting. A process of mutual obsequious service goes on hourly between strangers all over the world, commerce consisting of a duplex system in which commodities and services are going one way, and their equivalents are returning. As the commodities unite in the currents of transportation, they become great cargoes. As the payments divide in the return currents of distribution, they become as small as the finest atom of sugar that can be detected by the nerves of taste. Mr. Jevons happily states this law to be, that value is due to need, and declines with satiety, in each individual. Owing to the fact that his capacity to consume any one thing is very limited, while his capacity to produce many things is almost boundless, as is also his desire to possess the products of others, a decline, in the value of all he produces over his own need, can only be prevented by his forwarding the surplus to him who needs it most, such last named need being expressed economically by the value of the return service he is willing to render. As there is no limit to the degree in which one can desire the products of others' labor, so there can be no limit to the degree in which he shall be stimulated to produce, however small may be his capacity to consume the very thing he produces. Every commoodity declines in value in the degree that it exists in surplus at the point of production, but advances in value as it approaches him who most needs it. This law of declining and advancing values is the steam which propels the social mechanism. It is the involuntary philanthropic force which mainly feeds, shelters, clothes, employs, nerves, stimulates, educates, and governs the world, first in its industries, and then, where its industries fail to give relief, in its charities, which are as it were, its industries in the minor key. For charity is evolved among men because it is valued ; it comes in obedience to demand. Where gifts are highly esteemed they are made ; where effort for others is appreciated it is put forth. For all moral and religious, heroic, humane, and charitable effort results in a subtler and more spiritual form of profit, carrying with it an increase of social and spiritual capital and power, which to finer natures, is more regarded than money.

80. The Greater the Accumulations of Reproductive Wealth the More Equal the Diffusion of Enjoyable Wealth.—To insure a complete and effective distribution of wealth among mankind, involves the expenditure of an enormous labor power, and the pressure of the most terrible persistency of

motive. It is accomplished so perfectly that cases of physical suffering are extremely rare in all parts of the world, are usually associated with great imprudence or with stubborn vices, and are easily corrected by even a brief return to prudent ways. To insure this pressure of motive, wealth is divided into two kinds, one of which can be the object of only a limited avarice, and then immediately satiates, viz., enjoyable or consumable wealth, and the other of which, reproductive wealth, is the subject of custody and the means of social power, and can not be directly enjoyed.* So instinctively do all men assume this truth that to assume the opposite surprises us with a sense of humor.

Col. Ingersoll effects this surprise, which is of the essence of humor, when he says, "How absurd that a man who already has 1,000,000 neckties, of which he can only use one a day, should work all day to get another necktie." The absurdity consists in selecting as the object of avarice a form of consumable wealth, instead of those forms in which wealth may be stored for ostentation, as gold and diamonds, or by which it may be reproduced, as money, houses, lands, ships, banks, factories, machinery, etc. The passion of avarice can not be excited in favor of consumable wealth, except as it may constitute a merchant's stock of goods while it is in reproductive use. No miser works all day for another necktie, or apple, or orange. The passion of avarice can only be felt for those forms of wealth whose accumulation in large masses is a means of production, or of distribution, or of ostentation, or of security, or in some way ministers to more permanent wants than enjoyable wealth does, chiefly in the organization of society. The one might be called individual, pleasurable, sensational, transient, emotional, perishable wealth. The other is social, instrumental, indirect, reproductive, capitalistic wealth. Food, raiment, shelter, works of art, entertainment and instruction, music, books, pictures, etc., are enjoyable wealth, though all of them become reproductive capital when gathered in stocks for sale, and the more permanent of them approach reproductive wealth, and often cross and recross the boundaries. Power's "Eve" or Church's "Niagara," exhibited for an admis-

* Prof. Henry Sidgwick ("Principles Political Economy," p. 86) says there is "need of a broad distinction between the two portions of a country's material wealth, which may be distinguished as consumer's wealth and producer's wealth respectively. By consumer's wealth I mean such material things as . . . are directly available for satisfying human needs and desires, producer's wealth (and similarly of course producer's services) being only useful indirectly as a means of obtaining the former."

sion fee, is reproductive wealth. Placed in a private residence it is an æsthetic and high grade of enjoyable wealth, useful, also, like gold or diamonds, for storing wealth, and resembling reproductive wealth in the fact that while the title to it may be private, its highest uses are social. Arms, factories, roads, and their means of conveyance, mines, ships, shops, stores, banks, machinery, money, are all reproductive wealth. Mankind are chiefly interested, both from the economic and the humane point of view, in a distribution of these several kinds of wealth in divers ways. Consumable commodities need to be so distributed that the capacity of each individual to consume, especially clothing, raiment, and shelter, shall be satisfied. Consumable wealth, when returning in payment for commodities, needs to be so distributed that each agent in production, capital, labor, land, skill in management, etc., shall be paid in proportion to the degree in which it aids production. Reproductive wealth, since it can not be directly enjoyed by the body, needs to be so allotted that mankind shall get its most abundant and effective use on the most economic terms and in the most convenient way.

The farmer's wheat is governed in value by the law of satiety. All that he and his family can not eat becomes worthless, except as he can send it to those who produce no wheat. The question, what distributive share of the price the farmer will get, depends on how much of the price which it sells for in New York or Massachusetts will have to be deducted for railway freight, and paid out for wages and rent of land, or interest on capital. This depends on the economic laws governing the use by society of reproductive wealth. One of the most important of these is that, the greater the accumulation and concentration of reproductive capital under a single control, the lower will be the rate per cent. at which society can get its use, and the greater will be the number and variety of the use, it will render.

Here, therefore, are two laws, both appealing to the same passion of gain, with equal potency but in opposite directions. The law of satiety, confined to consumable commodities, says to their owner, "Away with them to those who are in need, send them swiftest to where the want is greatest." The Law of Economy of Capital says, "The greater your capital the cheaper must its use be lent to the producers and consumers of consumable wealth." Society's interest, therefore, is in making consumable goods repulsive to the owner, producer, and capitalist the instant a supply sufficient for immediate need is obtained.

But society's interest is also that the accumulation of reproductive wealth, which is mere control or management, and not consumption, shall go on under the sway of an ambition that is insatiable, until it results in a power larger than its owner has the capacity to use profitably—a fact which is both made known, and corrected, by the fact that he begins to invest unprofitably—therefore to lose on his investments, and thereby to disperse his capital.

The function of all reproductive wealth, *i. e.*, wealth that earns or makes wealth, is either to create consumable commodities, as is done by the farmer, manufacturer, mechanic, artist, etc.; or to forward the consumable commodities as rapidly as possible to their consumers, as is done by ships, railways, carts, and wagons, steam-power, mule-power, porter-power; or to distribute the ownership, and subdivide the title to it, among all these consumers, as is done by merchants, traders, exporters, and middlemen; or to fix stable and uniform prices on commodities, so that profits and wages may be made steady, by steadying that surplus, of price over cost of production, out of which profits and wages arise, as is done by produce exchanges and boards of trade; or to receive from consumers and transmit to producers the returns or means of payment, as is done by banks, by coin, and by all agencies that issue money; or to distribute these means of payment among producers according to their several shares, as is done by the *entrepreneur* and capitalist in employing labor, hiring land and money, and paying out rent, wages, and interest; or to maintain order, observance of contracts, and integrity among all these interests, as is done by courts of law; or to create such a popular conscience, as will alleviate the cases of failure and suffering to which the industrial life is in exceptional cases subject, as is done by religious, masonic, co-operative, philanthropic, and benevolent agencies for aiding the bereaved, defective, delinquent, and unsuccessful classes.

Reproductive capital is to society, relative to consumable commodities, what the engines, tunnels, aqueducts, and water-pipes of a great city are relatively to the water which they bear to the thirsty, viz., means of forcing it from the point where it exists in surplus, and is therefore useless, to the million points where it is not only needed, but most needed, the degree of need being always certified in economics by the return of effort or price the supply will bring.

The question whether unequal diffusion of wealth is favorable to all the other interests of society as it is to production, whether

it promotes the highest development of intellectual ability, a wide diffusion of education, free republican institutions, or good morals and kindly and neighborly feeling among men, is important but not strictly economic. It is because, what has been so freely and frequently said, and conceded, on these grounds, in behalf of equality in the diffusion of wealth, has caused a part of society to question the economic necessity and justice of any inequality, that a defense of inequality from the economic standpoint is necessary.

81. Capital as a Laborer.—Who first made the estimate, that the machine-power of England is equal to the manual labor-power of six hundred millions of people, I can not say. It has been widely current nearly fifty years, and, whether accurate in detail or not, expresses a general truth of the first importance, viz., that in modern history, since the advent of steam and steel, capital, through these agencies, utterly dwarfs manual labor in its power to produce commodities. If labor be defined, as the direction of effective natural force toward the production of commodities or services for the relief of human want, which is manifestly its broadest purpose, it occurs that by far the largest portion of the world's work is now done by capital, not in its employing capacity, but in its capacity as a physical toiler and a displacer of human toil. Capital, in the form of engines, boilers, tracks, and other rolling stock draws all crops to market in Western nations, leaving men to carry them on their backs only in China and parts of India. Capital, in the form of spinning jennies and power looms, does all the weaving of cloth. Capital, mainly, lifts the coal, and melts the ore, and hammers the iron. Capital sets the type, prints the newspaper, and transmits the news electrically over its wires. Capital constructs watches, predicts the weather, engraves, sews, and carves. Almost all of what is called skilled labor now consists in the wages-worker acting as tender, feeder, or regulator to the working machine. Hence old-time positions are reversed. Once labor toiled physically and capital superintended. Now, in the main, capital performs the physical toil and labor superintends the machine while it does the work.

Thus, on the elevated railways in New York city, all that the employes are hired to do, is to simply do a little *knowing*. The change-taker must know that the ticket does not pass out to the passenger until it is paid for. The ticket-man must know that the ticket is dropped when the passenger passes through to the platform. The gate-man must know that the train has stopped

before the passenger tries to get on or off—and that all are on or off before he signals the engineer to start. Finally, the engineer must know that he is signaled before he starts. Not one of all these employés performs a stroke of work that could not be performed by touching a spring with the little finger.

This revolution has several economic effects of the utmost importance. It makes every effort of human labor, to work productively without the aid of capital, impossible. A man can not walk, from New York to Chicago, so cheaply as he can pay his fare. The difference in cost of subsistence and lodging while going would make walking the costlier of the two. So, on no terms of cheapness, can unaided labor compete with capital, in the form of machinery. Yet, as capital in these machines does the same work as labor would otherwise do, it fixes the wages of labor, or the value of the share which manual labor can earn by doing it. This is admitted by Karl Marx, and forms the chief reason why he says the mass of society should be the owners of the instruments of production. On the introduction of spinning and weaving machinery in England, the spinners and weavers felt their supersedure so keenly that they gathered in wild, riotous mobs and broke the machines. Pretty soon their services came into use in working the new machines, and the demand for English labor was rather greater than before, and wages rose. But this rise was due to the fact, that the services of a very much larger number of spinners and weavers were undergoing displacement in China, Turkey, Portugal, the United States, and India. The housewife ceased everywhere to be the manufacturer, but only in Lancashire did the housewife get the profit of her supersedure, in the form of employment on the new looms. But for this widening of the market, the class who went out of employment in England must have remained without, at least in any department of weaving.

The performance of work, by capital, always works an immediate supersedure of the laborer, and only re-employs him in the same general industry in case the market for its commodity is widened. What would become of laborers, asks the socialist, if capital should advance in the use of machinery until it could perform absolutely all labor without invoking human aid at any point? It could do all, and possess all, and where then would labor be?

The logical answer to this question would be that, if capital could manufacture the machinery of production without the help

of labor, it would turn it out so cheap that a song would buy an engine, and the machinery of production could not, by the terms of the proposition, any longer bear a price.

An increased amount of co-operation in production, a spirit of greater mutual subserviency, is necessary in consequence of the great part of the work done by capital. The only men who can fit into the new industrial order are the the men of tact, who can accept discipline readily and obey orders implicitly, for only through such men can a wide organization of labor and capital, in industry, be effected. This causes the highest rewards of industry to come to the organizers. Their value is so generally recognized that it makes but little difference in their income, whether they work with their own capitals for profit, or manage the capitals of others for salaries. On the contrary, it becomes difficult for the recalcitrant, "cranky," independent, and insubordinate class of workers to work in the more condensed centers of industry. Their best interest is to move out toward the periphery of the societary circle, where less subserviency to central headship is required and more personal independence is permitted. Hence the desire of every man "to be his own boss" prompts the class whose individuality is strong, to leave the centers of industry, where capitals rule, for the pioneer life, which can still be had by those who seek. On the frontier the capitals are still small, machinery has not yet superseded hand-labor, and there is less power, but more liberty.

82. Forms of Capital.—Are land, debt and credit, money, reputation, good-will, forms of capital when employed reproductively and for a profit? If they are capital, as between individuals, do they necessarily become additions to the aggregate capital of all the individuals in a country, to the same extent as they become capital between borrower and lender? And if so, what distinction is there between manufacturing capital and running in debt? The difficulty in assigning to land the quality of capital arises partly from the fact that "capital" has been by some defined as the "fruit of abstinence," while title to land is, on the contrary, the fruit of appropriation. The power to appropriate land, however, arises always in connection with a prior expenditure in the nature of abstinence of various kinds, but more usually abstinence from the attractions, and high rewards, and high wages and ready amusements, of a compact social life. A century ago the tendency of economists was to speak of capital as the fund expended upon land, rather than as including the land itself.

We think it more exact, to regard every economic term as bearing a change of definition, according to the changed aspect in which it is presented, or the change in the function it performs. Land may be capital to one, and a mere burden on the capital of another. If a publisher have $50,000 of capital invested in his business, and withdraw $15,000 of it to invest in a residence, in this case, and so far forth, his land is a deduction from his capital. If, however, he farms his land, or converts it into a driving park, in a manner that intends profit, it becomes capital, even though he lose on it, but it is an unprofitable investment of capital. So far as giving mortgages on land, or otherwise incurring debt, leads to a profit which otherwise could not be had, they are capital. The antithesis of capital is not properly labor, but either lack of means—destitution—or means not set in motion to produce profit—*i. e.*, a hoard. Capital is means in motion—wealth at work—financial energy in action. It differs from a mere hoard as steam from water, or a river from a pool, or life from death.

The incurment of a great national debt, during war, is frequently spoken of as an unredeemed waste of capital, as the firing of wealth out of the mouth of cannon, etc. This mode of expression comes into conflict with a broad popular sense that such periods are also periods of an extraordinary activity of exchange, stimulus to production, and creation of wealth. To whatever extent running in debt, or the creation of credits, or even the destruction of values, gives rise to profits which else would not have existed, and increases production as well as consumes products, it becomes capital. Much of the loss by the great Chicago fire of 1871 was offset by the increased activity induced by the rebuilding. Much of the apparent possibility of gain which attends long periods of peace is converted into relative loss by the increasing timidity with which capital shrinks from enterprise. Hence the history of the period of England's wars with Napoleon was, in both England and America, one of rapid growth of capital. The history of the ensuing peace, from 1816 to 1837, was marked by stringency succeeding stringency, and great individual distress, and private and public bankruptcy.

In outward symptoms an expansion of credits has all the appearance of a growth of capital. A shrinkage of credits affects industry in all its departments as a destruction of capital. Business men will repeat with great conservatism of manner the saying that things are getting down to their intrinsic values, or down "to

hard pan," when property of various kinds declines in value under the influence of a general collapse of credit. If it were generally understood that value is merely the esteem in which the things are held which constitute capital, it would be seen that the process of reduction in esteem might go on until all capital and civilization had disappeared, and but one inhabitant would be left in the world, and he might be fleeing before a pack of wolves, in which case "hard pan" would still be just before the fugitive, and his intrinsic value, to the wolf, would not be realized, so long as he was able to maintain his flight.

83. Capital as an Emancipator.—The greatest service, performed by capital for man, consists in having abolished forcible slavery, as the means of organizing labor, and substituted for the lash the stipulated wage in money.

It was not merely necessary that money should exist, and be generally and actively circulated, before masters would come to see a more ready persuasive in wages than in force. It was indispensable that money should take the form of capital and machinery, that it should involve calculations so intricate, and labors so arduous in its direction, customers so numerous and markets so distant and employes so multiplied, that employers should lose both the time and the desire to exert a personal tyranny over their men. Workmen may grieve at the heartlessness of a given number of hours of their labor being treated as a commodity, but how priceless to the slave was this boon when it was first granted. It was the very substance of emancipation—the essence of freedom.

The relegation of the former "servant" into a member of the "proletariat," over whose hours outside the shop the employer had no control, was also in its time emancipation.*

It may now be said that among all the largest employers of labor the desire to rule laborers, for the sake of ruling only, has essentially ceased to exist. The model capitalistic employer has now no more desire to rule a laborer, apart from the motive of profit, than he has to dictate styles to his customers, or prices to his sellers of raw materials. The animus toward despotism has gone out, and its place is filled by a desire simply to do the

* Grünlund, "Modern Socialism," p. 56, says: "Progress takes place *only* when either some individuals control other individuals, or when they voluntarily co-operate together. But voluntary co-operation is a hard lesson for men to learn, and therefore progress has to commence with compulsory organization, with control of every thing, with slavery."

most profitable thing. But this also the workman desires to do. If, as we have contended, all the employment of labor is a loan of the certain unit of capital essential to employ the laborer, and hence is a fair and equal exchange, the laborer dividing the joint product equally between himself and the share that hires him, it is obvious that the true and final emancipation from the wage condition will consist in the laborer buying and owning the capital that hires him. He will then be drawing the profit as well as the wages. In railroad enterprises the laborer can accomplish this result by owning $8,000 of the stock in the road. In manufacturing enterprises he need own only $2,500 of the stock. In farming enterprises $1.200 will suffice. When he has bought this amount of the capital of the enterprise for which he labors, he will be reaping the entire profit on the capital with which he labors. When all the workmen, on all the roads, shall have placed themselves in this position, it can no longer, with truth, be said that any one is making a profit out of their labor but themselves. This would consummate emancipation absolutely.

84. Redistribution of Ill-Used Wealth.—That investment in property of every kind, is a mode of distributing wealth in the direction of the greatest demand, appears from the fact that to make the property pay a return it must either be improved, or it must be reserved for improvements more valuable than it will now bear, or its holder will lose all he invests.

If he loses all he invests, this is certainly an effective distribution of his wealth. If he reserves it for improvements more valuable than it will now bear, this is part of the process of improvement itself. If he improves it, *i.e.*, puts on buildings for rental, he multiplies the supply of shelter and working and living space, and makes one investment of his whole capital in labor in the act of putting up the buildings.

If the profit-maker, by means of employing labor and investing capital successfully, becomes so wealthy that he desires to live luxuriously and ostentatiously, he enters on the systematic dispersion of his wealth among the laborers of distant lands, and among those classes of the earth's population whose existence is most precarious, and who stand most in need of financial help from the centers of civilization, because of their distance from civilization and wealth.

Luxurious living is best adapted to the relief of the precarious and distant workers, while reproductive industry is best calculated to help the near, sure, and strong workers immediately around

us. For the near, sure, and strong workers immediately around us will generally be found producing the necessaries of life, since the production of the necessaries of life always commands the surest returns and pays the steadiest rates of interest on capital. Therefore, the investment of capital reproductively employs the raisers of the crop, builders of the houses, preparers of the food, clothing, and shelter in and on which we subsist. As human subsistence depends on these occupations, a fair return must always accrue to them somewhere. If the farmers in Ireland suffer it must be that farming is carried on in America under more favorable conditions, and these the Irish farmer comes to America to obtain, until, by the mobility of labor, the conditions are proximately equalized.

85. Distribution by Luxury.—The luxuries, on the contrary, are precariously produced. The hardy Norway or Spitzbergen savage moves each year nearer to the pole in order to get with more ease the ermine which is worn by kings and judges in the courts of Europe, and the eider down which makes the princess' pillow or lines the duchess' cloak, as well as the sealskin which protects the fine lady from the cold in the winter of our warmer clime. The negro on the Congo brightens his home in the jungle with the return he gets for the ostrich feathers or ivory which he sends hither to be worn in ladies' hats or carved into elegant designs for ornamenting their bureaus. The mountaineer in Peru or Hindostan toils hard with his herd or pick or drill in the mountains, knowing that he can live on the flesh and milk of his few goats, and now and then may be made rich with the price of the crystal of value which he finds, or even a diamond. The Ceylonese pearl-diver is lifted higher, in worldly comfort, by the fact that fine ladies in Paris pay for, and wear, the trophies which he brings up from the ocean's depths. The Parisian lace-maker is poor, and her life precarious, because fine laces can never be a strict necessity of life; but lace-making wards off the wolf of hunger, and makes her grateful for the vanity of the wearer of fine laces, which are to their maker life itself. The diamond-cutters are poor. The diamond-wearers are rich, but the diamond-cutters are less poor than they would be if no one wore diamonds. The Spanish peasantry, cultivating grapes and making wine on the Pyrenees, are poor, but they are richer than if the distant rich abstained from wine.

The silk and tea growers of China produce what is felt to them to be a necessity, and are in such a condition of comfort that

Adam Smith, though with some error, speaks of China as the wealthiest of nations. The growers of roses in Bulgaria, from which attar of roses should be made, are poor amidst their flowers, but richer because of the foreign market for their luxury. Art is a luxury, except in so far as it is a popular amusement. Hence, great artists have struggled hard for life, but not so hard as if fewer patrons of art had been willing to scatter wealth on pictures. Historically, the fine arts have depended on the rich for their patronage. These instances show that luxury is often and generally the almoner whose benefaction carries relief to the most diversified classes, and to the farthest distance, both geographically and socially.

86. Its Humanity Arraigned.—"But," asks the socialist, "is it economically just, or necessary, that wealth shall be so unequally distributed that the use of luxuries, by one class in one part of the world, shall be necessary to relieve the misery and squalor of the poor, in others?"

Much of the vigor of this anthithesis consists in the assumption that luxuries are identical with happiness, and that poverty is identical with misery and squalor. No social fallacy can be more apparent. Those who use luxuries may live in great misery. Those whose lives are straitened by want, in a way that deprives them of many of the conveniences of life, may have better health, sounder minds, and happier lives than those who are surrounded by luxuries. Therefore, luxury can not be used as the antithesis to misery, but only as the antithesis to plainness of living. Prince Albert of England died in his palace, of breathing sewer gas. Hence he died in and of squalor or filth as truly as if he had lived in "Tom-all-Alone's." A. T. Stewart died of dyspepsia. Hence he died of slow starvation, for, if nutrition can not be carried to the blood, it is starvation to the body, whether it is stopped by lack of bread in the pantry or by lack of gastric fluids in the stomach. Sir Isaac Newton labored at times under a degree of nervous exhaustion through overwork which rendered him irritable and unreasonable in his treatment of his friends. Profoundly as they admired him, they at such times could not endure him. Feeling that his own condition bordered on insanity, he may not have been as truly blest in his career as the healthy and vigorous glass-blower who shaped the lenses for his telescopes.

The economic government of the world is such that the prime requisites of life, food, clothing, shelter, and society, come to all

the inhabitants of earth, with casual exceptions that are rarer than death by fire or flood. The human body and mind are also so elastic that they everywhere depend, for absolute ability to be happy, only on these four conditions. Servants are as generally happy as masters, the workers as the idle, the poor as the rich, the obscure as the famous, the weak as the powerful, the ignorant as the learned. The true question, because the true antithesis, must not be between wealth and misery, but between luxurious living and spare or frugal living. The question, as thus modified, becomes this: Is it economically just, or necessary, that wealth shall be so unequally distributed that the use of luxuries, by those who have more wealth than they can expend upon necessaries, shall conduce to supply those who produce these luxuries with the necessaries of life, viz., food, shelter, clothing and society. In this form nothing can be more just, social, or humane.

There seems to be as strong an inherent necessity in the nature of economic science that wealth should be unequally distributed as there is in human sentiment to oppose inequality. The unequal distribution of the ownership of reproductive capital is essential to the most economic steering or direction of industry, the most judicious inauguration of the enterprises which employ capital and labor, to the most universal and equal employment of labor, to the greatest diffusion and cheapness of the products of labor, to the most general equality in the wages of labor, to the most rapid and effective production of enjoyable commodities, and to the most far-reaching and equal diffusion of these commodities for consumption, both with reference to space, time, and numbers.

We have defined reproductive wealth as that portion which can not directly satisfy any want of man, but is employed to promote the production of enjoyable commodities. It includes land, labor, in certain aspects, machinery, ships, railroads, beasts of burden, and all means of transportation, money, whether coin or credit, banks, title deeds, and contracts, and the courts of justice for enforcing them, buildings rented for either residence or individual occupation, theaters, churches, schools, manufactories, stocks of commodities held for wholesale jobbing and retail, and generally every thing that will not be eaten, drunk, worn, or otherwise enjoyed, and consumed in being enjoyed, by its present possessor. Enjoyable commodities are food, the shelter of home, clothing, ornaments, books, and all reading matter, society, instruction, amusements, entertainments, plays to him who attends them, songs to those who sing and hear them sung, and every act or

thing possessing the element of cost or value which ministers directly to human gratification or produces pleasurable or desired emotion.

Reproductive wealth, considered with reference to the use its owner will make if it, has three stages, viz.: the period of abstinence or hoarding, which results in its accumulation; the period of power, in which it is employed to steer or direct the course of industry, to inaugurate new enterprises, employ labor, and produce commodities and wealth ; and the period of dispersion, waste, or altruism, by which it passes to other hands. These three periods marking the rise and fall of fortunes, correspond to the periods of growth and decay in living organisms.

87. Society's Gain by Economy.—In the period of abstinence, the worker is working for small returns. Perhaps it is Cornelius Vanderbilt rowing a boat as a ferry between Staten Island and New York for $1 a day or John Roach working in an iron foundry for $2.50 a day. In either case, many others are getting as much, but few others are saving as much. If another, getting the same wages, spends ten cents a day for tobacco, ten more for beer, ten more for riding in a stage when he could walk, and thirty cents a day for good clothes when he could wear as comfortable but less genteel for ten cents, and the penurious man saves the entire fifty cents, it is plain that while the hoarding is going on, the one who does not hoard has more enjoyments, more ease and a better time than the one who does. Hence, as to this period, the one who will never be rich, has no ground of complaint, and feels no sense of injustice, against the one who will.

When the saving of fifty cents a day has gone on for a year, it represents $150 capital. If the ferry line consists of three boats worth $40 each, Cornelius can now buy out the boats, or buy new boats and start an opposition line. If the line usually carries thirty passengers a day at one shilling each (old New York money) and earns freights to the amount of $10 a day, here are $13.75 to be got by hiring two men and working himself, after buying the three boats for $120. In short, he suddenly rises from wages of $1 a day to a profit of $10.75 a day, while he continues, by his work in rowing one of the boats, to earn also $1 a day.

But he stands a chance of losing his $120, for something may happen by which travel may cease, or the boats may be wrecked, sunk, or burned. This chance he ventures. Hence his increase of income is due to three qualities—abstinence, sagacity, and courage. Having now an income of $11.75 a day, if he continues

to live at fifty cents a day he can in fifty days buy a sailing sloop which will cost $500, and increase his earnings to $20 a day, while lessening his labor and expenditure. In every step of this process he benefits the labor that needs employment and the people that need transportation. The people of Staten Island get a public ferry established, greatly to their profit, without being at any expense in its establishment. If it proves to be a mistake of judgment, and a losing affair, the loss all falls on Cornelius. This is a saving and gain to society in the first instance, as compared with the cost of imposing a general tax whereby to start the ferry—a project so doubtful that it would perhaps be a more costly labor to get the people to vote for it, than to start it at private risk and run it at private cost. Hence, alike in the period when hoarded capital assumes the responsibility and risk of inaugurating new enterprises, steering industry, and employing labor, the public at large make a great saving in being relieved of all risk and cost in a matter which will inure to their great advantage.

The qualities of character which fit a man to employ labor and direct industry are :

(1) *Parsimony.*—This disposes him to devote the minimum of his means to personal consumption of himself and household, and the maximum to reproductive purposes. This is what society itself at this stage most needs, since it wants reproductive industry to go on most actively.

(2) *A Keen Perception of Values.*—This enables him always to so adjust his purchases of raw materials and of labor, and his observations concerning the tendencies of demand or the future wants of his customers, that he will buy and produce for less than he can sell. Only thus can he achieve that expansion in his capital, by which to expand his purchases of materials and labor and the magnitude of his sales. Hence the community are interested that every attempted producer of wealth should have a keen sense of value. Without it his business can not obtain that magnitude which is essential to cheapness.

Finally, financial courage, or the will to let money go when money is to be made by risking it, is required. Without this, one's capital will slowly consume in expensive timidity and unproductive idleness, while one is waiting for those ideal opportunities to arise in which the profits are large, the returns certain, and there is no risk of loss. Such chances never come.

Producing on a large scale promotes production on a cheap

scale; (a) by the sub-division of labor it makes possible; (b) by the substitution of machinery for manual labor which usually accompanies it; (c) by getting control of a larger demand for consumption; (d) by the substitution of credits for cash in its expenditures; (e) by passing securely through reverses which would wreck industries conducted on small capitals; (f) by paying wages of superintendence to but few persons in proportion to the whole number employed; (g) by the skill and delicacy of judgment concerning questions of profit which is developed by a long habit of doing only profitable things.*

**Example A.—Effect of large capitals to induce subdivision of labor.*—Adam Smith began his great work ("Wealth of Nations," Bk. i. Ch. i.) by pointing out that while one man, working alone, might not be able to make more than one pin a day, certainly not twenty pins, ten men, each making a particular part, one drawing out the wire, another straightening it, a third cutting it, a fourth pointing it (or rather, pointing numbers of pins at once), a fifth grinding it at the top for receiving the head, the other three making the head by as many distinct processes, and so on, the whole ten could make about 48,000 pins a day. Each one would thereby increase his make, by mere sub-division of functions, from one or twenty pins to 4,800 pins.

Many persons can earn their own living by rag-picking, street-sweeping, chimney-sweeping, and other peculiar occupations, very simple, and requiring no skill, strength, or endurance, in a community where there is a great division of labor, who, if required to live by farming, hunting, or systematic work at a trade, would die. Some writers appear to so mistake the fact that very helpless and inefficient workers crowd into the great cities and live there as to infer that, because such are only found in the great cities, therefore there is something in the construction or management of society in great cities which makes them helpless and inefficient, whereas the fact is, the sub-division of employments in great cities reduces them down to processes so simple that the simplest minds and weakest bodies are there able to find something which they can do. Hence Henry George says:

"To see human beings in the most abject, the most helpless and hopeless condition, you must go, not to the unfenced prairies, and the log cabins of new clearings in the backwoods, where man, single-handed, is commencing the struggle with nature, and land is yet worth nothing, but to the great cities where the ownership of a little patch of land is a fortune."

Conceding this to be true, it only indicates that thousands of people can get a living of some kind, where there is great subdivision of labor, who would perish if presented with a quarter section of land and obliged to get a living from it.

Example B.—Substitution of machinery for manual labor brought about by large capitals.—Mr. Moody* computes that on the Grandin farm in Dakota wheat worth 70 cents per bushel is produced at a total cost in all ways of only 16 cents per bushel, leaving a net profit on the first year of farming of 54 cents per bushel, or over 300 per cent. Mr. Edward Atkinson† says: "If we convert the work done in the direction of machinery upon the great bonanza farms of far Dakota into the yearly work of a given number of men, we find that the equivalent in a fair season, on the best farms, of one man's work for 300 working days in one year, is 5,500 bushels of wheat. Setting aside an ample quantity for seed, this wheat can be moved to Minneapolis, where it is converted into 1,000 barrels of flour, and the flour is moved to the city of New York. By similar processes of conversion of the work of milling and barreling into the labor of one man

* "Land and Labor in United States," by Wm. Godwin Moody, p. 52.

† "The Rate of Wages," p. 75.

88. Society's Gain by Large Accumulations.—Large capitals draw lower rates of interest than small, notwithstanding that equivalent quantities of capital in them often, and except in

for a year, we find that the work of milling and putting into barrels 1,000 barrels of flour is the equivalent of one man's work for one year. By a computation based upon the trains moving on the New York Central Railroad, and the number of men engaged in the work, we find that 120 tons, the mean between 4 500 bushels of wheat and 1,000 barrels of flour, can be moved 1,700 to 2,000 miles under the direction of one man, working eighteen months, equal to one and one-half men working one year. When this wheat reaches New York City, and comes into possession of a great baker, who has established the manufacture of bread on a large scale, and who sells the best of bread to the working people of New York at the lowest possible price, we find that 1,000 barrels of flour can be converted into bread and sold over the country by the work of three persons for one year. Let us add to the six and a half men already named the work of another man six months, or half a man one year, to keep the machinery in repair, and our modern miracle is that seven men suffice to give 1,000 persons all the bread they customarily consume in a year. If to these we add three for the work of providing fuel and other materials to the railroad and to the baker, our final result is that ten men working one year serve bread to 1,000."

"Again, iron lies at the foundation of all arts. At an average of 200 lbs. per head in the United States, the largest consumption of iron of any nation, we yet find that the equivalent of one man's work for a year, divided between the coal mine, the iron mine, and the iron furnace, suffices for the supply of 500 persons. One operator in the cotton factory makes cloth for 200, in the woolen factory for 300; one modern cobbler (who is any thing but a cobbler), working in a boot and shoe factory, furnishes 1,000 men, or more than 1,000 women, with all the boots and shoes they require in a year. So it goes on, and the more effective the capital the higher the wages, the lower the cost the more ample the supply."

Of course, if the general cost of producing wheat throughout the world could be brought down to the low figures of production in Dakota, wheat would soon fall everywhere to about twenty cents a bushel, and bread to one cent a loaf.

In printing, seventy-five men can do as much work on a modern printing press as ten thousand men could have done with the hand-presses in use in the beginning of the century. In building, the planing machine does the work of twenty men. In boot and shoe making, one man fifty years ago would make two hundred pairs of boots and shoes in a year—now three hundred pairs. One woman will sew on a machine as much as twelve with the needle.

Example C.—Of the use of large capitals in controlling a larger demand for consumption.—This is conspicuously seen in the operations of competition between rival railways and great manufacturing companies, and underlies their tendencies toward consolidation. Mr. Vanderbilt purchased the Harlem Road when its shares were worth from eleven to nineteen cents only, and when it was almost without business. He then offered to carry all the traffic coming into Albany over the New York Central for one fifth of what had previously been paid to the Hudson River Road for the same service provided the Central would make a like discrimination in favor of the traffic coming to Albany over the Harlem against that coming by the Hudson River. The inducement was too great to be resisted. In a few days Hudson River Railroad stock fell so enormously, and Harlem rose so rapidly, that Vanderbilt was seen to be master of the three roads by owning one. He soon passed into legal control of all the three. By massing his capital, so as to effectively control the largest possible demand for the work of his road, he revolutionized the railway business, and, applying the same tactics to the other roads, compelled their virtual consolidation with the New York Central, thus converting railways from single roads into systems. This made him the richest man living, and did much to improve railway transportation and cheaper freights.

farming usually, effect a larger production of wealth; and thus the community makes an economy out of large capitals which it could not effect with the same quantity of capital subdivided

The rates at which railway freights were cheapened, largely through the increase of traffic and cheapness of service brought about by this system of concentrated control, are shown by the following table, prepared by the Hon. Joseph Nimmo, Jr., late Chief of the Bureau of Statistics:

Years.	By lake and canal. Cents.	By lake and rail. Cents.	By all rail. Cents.	Years.	By lake and canal. Cents.	By lake and rail- Cents.	By all rail. Cents.
1868	24 54	29.0	42.6	1877	11.24	15.8	20.3
1869	23.12	25.0	35.1	1878	9.15	11.4	17.7
1870	17.10	22.0	33.3	1879	11.60	13.3	17.3
1871	20.24	25 0	31.0	1880	12.27	15.7	19.7
1872	24.50	28.0	33.5	1881	8.19	10.4	14.4
1873	19.19	26.9	33.2	1882	7.89	10.9	14.6
1874	14.10	16.9	28.7	1883	8.40	11.5	16.5
1875	11.43	14.6	24.1	1884, Jan. to Sept.	6.60	9.75	13.0
1876	9.58	11.8	16.5	Quotations are wanting for 1885.			

It is shown by this table that since 1868, when the statistics commence, the freight on wheat from Chicago to New York has declined to one-fourth its original value in sixteen years.

Example D.—The subjugation of the Confederate rebellion by the Union arms was financially, perhaps, the most remarkable triumph ever witnessed of the substitution of credit for cash values. At the outset the Federal Government had no money, and not more than $50.000,000 in gold, all told, existed in the country, and hardly any of this was in the hands of the government. Secretary Chase met the bankers of New York, by appointment, to obtain a loan. They offered him $50,000,000 at a high rate, and said "that must be their ultimatum." "Gentlemen," said Mr. Chase, "it is for the government of the United States to propose ultimatums. Since you can not lend me the money on which to run the government, I will compel you to run your banks on my money, if I have to issue government notes until it takes a bushel of notes to buy one breakfast." The war was fought through almost wholly without any other than credit money, the only tie connecting it with gold being that it was, for a time, fundable into gold-interest paying bonds, the gold interest on which was secured by collecting the customs duties in gold only. For every other use in the United States, except that of paying customs duties and interest on the public debt, the credit of the government was substituted. This substitution of government credit, in the form of greenback notes and bonds, for the previous attempt to use gold, became in reality, since very little gold had been in fact used, in substitution of public for individual credit, or of government notes for book accounts, which had the effect of bringing business over from a private credit basis to a private cash basis, through the use of government credit, as the equivalent of cash, in all domestic trade.

Goods which had previously been sold on long time, *i.e.*, on the buyer's promise to pay in 60 or 90 days, were now sold for government notes. These became so abundant and so cheap, relatively to gold, that debts which prior to their issue could only be paid with $100 in gold could now be paid in notes, the gold value of which was only $70, $60, or, at least for a few weeks, $45. As every body who had money preferred something else to it, cash payments were promptly made on every side, and promptness in meeting liabilities had almost ceased to be a virtue. The bankruptcy of the government made every body flush. The business failures shrunk in the United States from 6,993 in 1861 to 495 in 1865, from a total liabilities involved in 1861 of of $207,210,001 to a total liabilities involved in 1863 of only $7,899,000. Crimes against person and property fell off in like proportion, jails were empty, and the courts de-

among many holders. A newsboy with fifty cents capital will buy fifty papers at one cent and sell them for two cents each in a day. Although he combines a good deal of labor of running and shouting, yet no part of the fifty cents is wages of labor, because no person employs him, and he places his whole capital at risk. If he should happen to lose his papers, or they should be destroyed, or remain unsold until the next day, he would have lost his entire capital. Hence no part of his gain is wages, but all of it is profit; for profit may, as well as wages, be an inducement to labor. The profit on the fifty cents is 100 per cent. a day. When he has made a dollar he can employ a comrade who has no fifty cents to help him, giving him half the profits; and at the end of the next day, if successful, he will have seventy-five cents as the gain of that day, fifty cents on his own work, and twenty-five cents on that of his comrade. His return on his second fifty cents is only 50 per cent. a day. When he has $10 his income would rise to $2.50, if he could get 25 per cent. a day on the whole, and he would be a bright financier if he could do better; for the quantity of leg-work and shouting which he can do in connection with each dollar of the ten is only one-tenth as much as he could do for the first dollar. As capital increases, the amount of labor the owner can give to a given sum of it declines, and therewith his profit declines. When the capital rises to $100, the newsboy or peddler of any kind who can make it earn him $10, or 10 per cent., a day would be a genius. When it becomes $2,000, and the newsboy has graduated into a merchant selling books or groceries, he could not hope, still with the utmost aid of his own labor and that of two assistants, to come out of the year with a gross profit of more than $2,000, so that the rate per cent.

---

serted. Shortly after the close of the war the former average of failures and crime again returned.

The substitution of credit for money, which the nation as a whole then underwent, has sometimes been imitated on a small scale by private firms and corporations, but the stringency in means, which usually suggests it, is not favorable to success, except in the cases of such notable trading firms as the Hudson's Bay Company, the Alaska Fur Company, the East India Company, whose promises or accepted orders would circulate among large populations in lieu of money.

Example E.—Of the use of large capitals to pass securely through reverses which would wreck the same industries if owned by small capitals.—In the shrinkage of railway stocks in the United States 1882-4, shares which had been worth $6,000,000,000 in 1881 became worth less by $2,000,000,000 in 1884. All this loss occurred without the suspension of traffic on any road or any interruption to business. Had all the roads been owned by small stockholders the ruin to individuals would have been widespread and the suffering very great, as one will readily see by assuming a similar shrinkage in the values of farms or other private properties.

has declined from 10 per cent. a day to 100 per cent. per annum. With $100,000 he is fortunate if he makes $10,000 by safe and regular business, without speculative investments, a still further decline of nine-tenths. When a man's fortune rises over a million he begins to invest at 5, 4, and 3 per cent., because he can thereby put his money where it needs no watching, and he is sure of his interest.

It is, therefore, a law of economics that the rate of interest, at which capital lends its services to society, declines as the volume of capital held by one owner increases. Large capitals also serve the public more cheaply than small ones. A merchant, having $1,000,000 capital, can and will sell goods cheaper than one having $10,000. A bank having a very large loanable capital can, and will, lend cheaper. The railways, representing $50,000,000 capital, each, in the Northern States, carry passengers at two cents per mile and freight at one-third to one-half a cent per ton per mile. Southern and frontier railways, having smaller capitals and less traffic, charge twice or thrice higher rates. The large factories manufacture cheaper than the small. Instance the great cheapening of goods everywhere, when the system of spinning and weaving in every house merged into the large factory system. Even the large landlords rent cheaper. Under the great landlords of England rents are far lower than in the United States or France, and, in the city of New York, those who can rent of the Astors or Trinity Church are estimated to fare about 15 per cent. better than those who rent of the small landlords.

The concentration of productive capitals, into few hands, promotes the most far-reaching and equal diffusion of enjoyable products or commodities for consumption, over the widest area, to the greatest number, and in the shortest time. Reproductive capital, not being itself enjoyable wealth, can be used for no other purpose than to forward enjoyable wealth to its consumer.

The banker does this when he cashes the check of a traveler making the tour of Europe, or a merchant buying goods. The merchant does the same when he sells goods and buys again. The manufacturer does this when he weaves carpets. Since all these men can, as we have seen, and do render this service more cheaply, the larger the capitals they have to work with, it follows that consumers must secure an increase of enjoyable wealth, by reason of the existence of the large concentrations of capital, which they could not get if those concentrations of capital were smaller. He gets his goods carried four times as far, for the

same sum, by reason of these concentrations of capital and control.*

89. Large Capitals Lessen Consumption.—The control or custody of a large amount of reproductive capital into the hands of one owner increases very little, if at all, the quantity of enjoyable wealth he can, or will, consume. On the contrary, it may in many ways diminish his capacity to consume wealth.†

---

* That the actual distribution of all enjoyable and consumable commodities is affected with marvelous equality among all the members of society is shown, by comparing the total amount produced in the country with the amount each *one gets*. Mr. Edward Atkinson* says "that the total value of the annual product of all industries in the United States by the census of 1880, including the part that is sold and the domestic consumption upon farms and in families, would not exceed $10,000,000,000 in the census year at the retail prices for final consumption." He then says: "If the census estimate be divided by the population of substantially 50,000,000 people, we reach $160 to $170 per year as the sum representing the average annual product for each person, or a fraction less than forty-four to forty-seven cents per day for 365 days."

Mr. Atkinson believes from other data the annual product is fifty-five cents per capita, or a little under $200 for each person.

The census, however, it must be remembered, only enumerates principal agricultural products and principal manufacturing products. In the matter of meats it fails to enumerate the annual growth and slaughter of meat for food, confining itself to the meats which pass through the the packing houses, viz., $303,000,000. It enumerates the total quantity of food-animals existing, but not the annual increase or consumption, not any of the meats killed by our 76,241 butchers throughout the country, nor by farmers on farms, nor the poultry, game, geese, ducks, etc., which are killed and consumed at home. These and other omissions in the census, amount, in the judgment of the present writer, to an error of 50 per cent. in the entire computation; for it is not probable that the meat-bill of the American people is less than $1 per head per week, or ten times the sum named in the census. If so, this error alone would bring the annual production up to $2,700,000,000 more than that stated by Mr. Atkinson. Whatever the total production may be, the whole force of reproductive capital is expended in speeding it to the point of greatest demand. Very little actual loss or waste occurs except in the unsaved sewage of the large cities. As Mr. Atkinson says, "if no more is produced no more can be had."

† The hoarders of small sums of money, say from $200 to $2,000, have in most countries so great a distrust of banks that they prefer to keep their hoard in gold, buried in the ground, or locked up in chests, or, as the phrase goes, in old stockings. This operates as a withdrawal of the hoard from circulation, and, in France particularly, the amount so withdrawn is an important and nearly constant quantity. As a rule, the large capitalists withdraw nothing from actual use by society in the form of a treasured hoard. Being well acquainted with banks, they deposit their entire hoard with them, and thus place it where, through the loans made by the banks, it will have all the circulation that can be given to it. Their stocks, bonds, shares, and other evidences of debt are not actual reproductive capital, but only claims upon reproductive capital. The railway shares represent engines, cars, tracks, and depots, in actual use by the employés of the company in serving the public. So of their shares in factories or other stock concerns. The rich, therefore, have no hoard, and withdraw a smaller idle capital from active use than the poor.

* "The Distribution of Products," p. 70.

The poor usually have more healthy labor and less harassing care than the rich, and physical labor has a better effect on the health, ordinarily, than mental solicitude. The plain, substantial food of the toiling classes promotes digestion better than that of the rich. As the poor man is not ashamed to select an expert cook for his wife, while the rich man would usually marry one who knew little about cooking, the poor man, at least throughout the United States, is rather more likely to eat well-cooked food than the rich. He therefore eats better, sleeps better, digests better, and consumes more food per day at the average, than one who has more money to buy food with. Nature has so limited the capacity of all men to consume wealth that it is difficult to pass its barriers. No man can eat more than three meals a day, and this all poor men get, with exceptions that are as rare as railroad accidents. No man can wear at once more than that limited supply of clothing which all poor men wear. If he buys more, he must, sooner or later, give it away unworn.

No man can sleep in more than one room at a time. If he build an extensive palace, he must either leave it vacant and gloomy, or he must fill it with his guests and friends, or his servants. If with the first, he makes his palace a temple of hospitality and sociability rather than a private residence, and the maintainance of such a palace becomes a most rapid and effective means of dispersing his wealth. If with the second, his palace becomes a comfortable asylum for the many poor—who will gladly render him the slight services they may be able to, in return for home—and a means of ostentatious, though somewhat lonesome, splendor to him.

Adam Smith regards an expenditure upon a costly retinue of servants and retainers as at all times an unprofitable expenditure. But it may be doubted if, all things considered, those who maintain the servants may not ordinarily be better judges than a distant observer, both of the cost of maintaining them and the profit. In the feudal and old baronial organization of society, in the patrician families of the Romans, and on the Southern slave plantations, there was a system of maintaining many dependants, each of whom would seem, to an observer, to do very little toward the common support. Yet this was a system, in effect, of industrial co-operation and reciprocal exchange, organized on the basis of rank instead of capital. But, where rank and authority have the effect to cause each to do toward the common support the thing he is best able to do, the effect may be as productive econ-

omically, and somewhat more stable, dignified, and honorable socially, than if the designed object of the general employer were to make money; and the sole motive of the employe were wages. Many of the Roman patricians, Southern slave-holders, and feudal barons contrived, notwithstanding the large force of servants they had to feed, to grow rich out of the profit made from their aggregated labor. If in patricianism the command of the superior insures the obedience of the inferior, it becomes a substitute for wages. Those who are supposed to keep a large number of servants, for display, will usually plead that they can not accomplish the results they desire, with fewer. There may be an economy of time, an economy of patience, or an economy of social prestige and respect, connected with living at a given rate of expenditure, which may make it pay the person who indulges in it, better, pecuniarily, than the more stringent mode of living which a parsimonious adviser would recommend. "There be that scattereth and yet increaseth, and there be that withholdeth and yet it tendeth to poverty." Parsimony is not always economy, and costly expenditure is not necessarily waste.

If a Stewart or Vanderbilt expend $1,000,000 on a residence which will continue to hold at the average, including family, servants, and guests, thirty persons, every year for 500 years, the consumption of wealth incurred in its cost when distributed over all persons accommodated is reduced to the very moderate sum of $66 per year, or but little over $1 per week to each person, which is as low a rate as newsboys can hire their lodgings for by the night. So, when a poor sewing-girl purchases a piece of cheap jewelry for a dollar, which in one year she will throw away as worthless, the amount of wealth stored by her in the commodity is very small, relatively to the amount stored in a diamond, for which a duchess pays a thousand guineas. But the amount of wealth consumed by the sewing girl is the greater, since the diamond, unless burned up, will incur no waste of wealth in a thousand years, while the bauble wastes its value in one year. The greater permanence, durability, and fixity in the purchases and possessions of the rich, makes them as a class, therefore, the means of consuming little, if any, more *per capita*, and possibly less, than the poor who have the custody of very little, but actually consume a large part of what comes into their custody.

90. Effect of Large Capitals on Rates of Wages.—What effect does the concentration of capitals, so as to bring the control

of large masses into one hand, have upon the rates of wages of labor?

Reproductive capital may be used to obtain a profit, either in the employment of labor and sale of its products, or in erecting and letting buildings, for the shelter of so many of the laboring class as must rent homes, or in effecting exchanges of the products of labor. So far as it is used to make a profit by directing and employing labor, its concentration in large masses increases the fund from which labor is to be paid, and increases the steadiness and certainty of the demand for labor.

In all countries where one man is worth about as much as another, labor does not admit of being organized and made effective for large undertakings, society is nomadic and isolated, distrust, suspicion, falsehood, and deception, reign in place of confidence and co-operation, the trader and usurer borders on the robber, and the rate of production is low. Such are Arabia, Tartary, Negroland, and all tribal life. Hence, wages must be proportionately low, since they depend on rate of production.

In India the large native capitalists were effectively stripped of their wealth under the rule of Clive and Hastings, in the manner set forth by Burke and Sheridan on the great occasion of Warren Hastings' trial. But since India was thus stripped of her capitalists by foreign oppression, rates of wages have been lower there than in any other country in the world, being for a good worker, in provinces distant from railroads and large towns, as low as $10 per year, or 4 to 10 cents per day. If India could be filled with capitalists wages would go up. Mr. Brassey* says of the Indian laborers: "In many districts black bread and water are the only food of the people, and the cost of this meager dietary varies from 5*s.* to 6*s.* per month" ($1.25 to $1.50). In Russia rates of wages are lowest where the people rely for a subsistence on the communal ownership of the land.

The payment of the wages of labor with steadiness, permanence, and amplitude being the chief function of capital, and payment of wages being the function for performing which capital is the implement, the larger and better handled the implement the more perfectly it must perform its function.

* In America, during our Colonial period, though Adam Smith speaks of rates of wages as higher than in England, they were but a third or fourth of their present rates. Working men and women would think it no improper thing, if possessed of a pair of shoes, to carry the shoes in their hands on Sunday until they approached the church door, there put them on and wear them during the service, remove them again on going out, and walk home barefoot to save the shoes.

Payment of wages can never cease to be, in effect, a division between the entire capital invested in an enterprise, and the entire labor employed by it, of the fund which remains out of the price received for the joint product of the two co-workers, after paying the cost of raw materials. It is, therefore, in a permanent sense, a division between partners, the whole capital being one partner, and the whole labor another. Carey, Bastiat, and Atkinson have agreed upon the formula which is true when applied to the history of any one enterprise--a cotton factory, for instance—that as the capital and labor invested in a permanent, successful, and profitable enterprise go on increasing "the absolute share of the value of the annual product falling to capital increases, but its relative share diminishes, while the share that falls to labor increases, both absolutely and relatively."

When the aggregate of enterprises in a prosperous country, or indeed, perhaps, in an unprosperous one, though of this we have fewer opportunities to observe, is taken into view, the principle of division employed is a perpetually recurring return toward that of equal division between the aggregated capital and aggregated labor employed.

91. Constancy of Returns.—Capital tends, on the first inauguration of new enterprises and the first introduction of labor-saving machinery, to get, as profits, a return graduated according to the cost of attaining the same result by manual labor, by the previous processes in use, or by the actual competition that exists. It is not until many capitalists compete in producing the same thing that it is brought down to the standard of interest on the capital required ; and, anterior to such reduction, it gets as profit a continually reducing sum based on the value of the wages saved, or the rate at which the same service could be rendered by hand labor. Also, in carrying on enterprises under more favorable conditions, capital gets at first, as profit, the difference between cost of production under anterior conditions and under these new ones. This is shown in the high rate of profit obtained by the first great bonanza farmers of Dakota, which was upwards of 300 per cent., while farmers might be found in the older States whose profits had declined to even 3 per cent. So, on the first introduction of a new railroad, the road will charge the rate which will secure the freight as against the overland team, thus obtaining for steam carriage only a trifle less per ton per mile than would be charged for carriage by animal power.

It is this choice of new fields for the investment of capital,

which keeps capital migrating, from old investments to new ones, and hence retiring from points where rates of return have declined, in the manner pointed out by the law of declining returns contended for by Carey, Bastiat, and Atkinson, and passing into new forms of enterprise where it will either be sunk altogether, or largely, or will reap a much larger profit. The law, therefore, must not be interpreted to mean that the aggregate of capital in the world reaps a declining rate of profit. Such a condition of things would lead to a final paralysis of industry. It is essential to high wages that there shall somewhere be industries in which, and points at which, capital and enterprise are reaping high profits.

It is only by the division of a high rate of difference, between cost of production and price of product, that high wages can be maintained, and as this division will be made by capital, it will make sure first of its own high profits. Hence, high wages can not be permanently had, except as high profits precede and cause them.

92. What Makes High Profits?—High rates of profit are due to the advance of a large body of consumers to a higher standard of living, at a lower cost of effort and exertion on their part, either through an expansion in the area, or cheapening in the processes, of production, or an increasing perfection in the distribution of wealth.

This may be due to discovery of new and more fertile areas for tillage, of new plants or animals for food, of new processes in manufacture or transportation, of new sources of money, new modes of exchange, and even of new institutions and laws better adapted to secure a large development of industry. It may be due also to new forms of government, great wars, or great migrations of populations. Hence high rates of profit are a mark, or sign, that industry and progress are making a successful advent into new fields or modes of industry. They can not be expected to continue, in any industry, after it has become of long standing, except as it may be made a new industry, by new processes, new conditions, or a new demand. Nor is the earth, by past advancement in art, or by increase of population, approaching the period when large or high profits can no longer be made in industries of any kind, or when migrations of populations to new regions, and transitions of old populations to new industries, can not take place. Such a period is, practically, as far removed as ever. The world's entire population, estimated at 1,400,000,000 persons,

could stand on an area ten miles square, and could be fed on the products of an area much less than that of the United States. Less than one-twentieth of the land of the United States capable of producing wheat has been improved.

Although the United States heads the list of agricultural and pastoral producers with an annual valuation of $3,020,000,000, Germany, which is not so large as Texas, yields in farm and pasture products more than two-thirds as much in value as the whole United States, viz., $2,280,000,000. France yields $2,220,000,000. Russia, with her immense superficies and 90,000,000 inhabitants, produces of food products only $2,545,000,000, which is barely twice as much as is produced by less than half her population in Great Britain, viz., $1,280,000,000, though Great Britain has an area about equal only to the two States of Illinois and Indiana.

The whole present cotton crop of the world could be produced on one-fourteenth of the soil of Texas. No man yet knows the capacity of an acre of land for production. Although China is reported to be overcrowded, the absence of beasts of burden and means of transportation leaves vast and fertile steppes in her interior without habitation or tillage. Many centuries must pass before the question whether "population can press on means of subsistence"* will become a practical one.

Indeed, it seems to be rendered untenable, even as a hypothesis, by the law that the lower the organization the greater the fecundity, or capacity for reproducing its species. As the lower organizations constitute the food of the higher, and possess the greater fecundity, it is not possible to conceive of the less prolific outrunning the means of subsistence furnished by the more fruitful.

93. Malthus' So-called Law.—Prof. Bonamy Price, of Oxford, speaking of the Malthusian law, so called, says: "What is the essence of this theory but the well-known fact that human beings, like all other animals, have a power of multiplying faster than their food?" Is this a well known fact?

---

* A mere numerical calculation of the rate at which a person's descendants may multiply, in successive generations of posterity, is of no more value to prove that the world will at any future date be more crowded than it now is, than a like calculation of the rate at which the same person's ancestors multiply as we go backward, would be to prove that the earth must formerly have held a greater population than now. Each existing inhabitant of the earth has but to go back a few centuries to find that his ancestors number by millions. Such calculations omit the crossings, or the degree in which the descendants, and ancestors, of each unit, count again and again as descendants and ancestors of the others.

Since, as human beings are the food of all other animals, and all other animals are, or may be, the food of human beings, and as the power of multiplying faster than their food pertains both to human beings and to all other animals, it follows that Prof. Price has affirmed both that human beings have a power of multiplying greater than that of other animals, and that other animals have a power of multiplying greater than that of human beings. Each being alternately the food of the other, if each multiplies faster than its food, each must multiply faster than the other. The greater multiplying power of food, compared with that of man, may be seen in the case of a married couple and a grain of wheat. In the colonial period of the United States, it is said that, one woman has produced as many as twenty-five children, though at present the production of from eleven to fifteen is extraordinary. Calling the age of man seventy-five years, a birth of twenty-five children to two parents would be thirty-three per cent. per annum to the two, or sixteen and a half per cent. to each unit of population. The highest actual increase in the United States is, with immigration, three per cent., and without immigration two and a half per cent. per annum. American wheat-growers sow 50,000,000 bushels of wheat annually to produce 500,000,000 bushels of wheat, being only ten-fold. But this is sixty times the highest alleged rate of increase in the human species in our colonial period, and is 300 times the present actual rate of increase. But this is far short of the potentiality of wheat under higher processes of production.

Major Hallett, of Brighton, England, in 1857–61, by planting wheat in rows a foot apart, and selecting best grains from best ears, and best ears from most abundant stools, attained the following result, beginning with best grains selected from best ears, four and three-eighths inches long, and containing forty-seven grains per ear, which he found in a common field :—

Year.	Ears Selected.	Height, Inches.	Containing Grains.	No. of Ears on Finest Stool.
1858	Finest Ears	6¼	79	10
1859	" "	7¾	91	22
1860	Ears Imperfect from Wet Season	"	"	39
1861	Finest Ears	8¾	123	52

In an ordinary wheat field, thickly sown, only one and a half ears grow from one stool. Here is an increase in fecundity from one ear having forty-seven grains (forty-seven fold) to fifty-two

ears, carrying in the best ear 123 grains, or 6,396 fold per annum. Such a hypothetical rate of increase would produce in the second year from a grain of wheat 40,908,816 grains, or seventy bushels, supposing the grains to retain only their previous size under improved planting. In fact, however, Major Hallett's processes very largely increased the size of the grain, causing 460,000 grains to make a bushel, instead of 700,000. Adding this quality, the possible productive power of a single grain of wheat, in two years, would be about 130 bushels.

And yet the fecundity of wheat is small compared with that of maize or potatoes. A single potato, planted on newly cleared ground in Northern New York, on which, in clearing, the resinous forest trees have been burned to ashes, will produce seventy-five potatoes in a single hill, one bushel in two hills, or 500 bushels per acre, and if cut up so that each "eye" becomes a hill will produce probably several times as many. In Dakota the small number of potatoes required to plant one acre have produced 1,000 bushels.

The fruitfulness of the lower animals is as much greater than that of man, as that of plants is greater than that of the lower animals.

Beside the fact, that the lower organizations and forms of life are more prolific than the upper, other causes tend to increase the means of support for man, as population increases. The utilities of things increase with their use, human progress being an evolution from the less perfect to more perfect means of production. Things, at first noxious, come to have great value. New varieties of food and medicine become known. A continually increasing regularity of diet promotes health, while a wider diversity of diet increases the nerve force and promotes intellectual labor. Beginning at the zero point where, perhaps, man first attempted to outwit the gorilla by sharpening his long club into a spear, and we must perceive that, to this savage, nothing has utility—still less value. The forests are useless, for he can not fell or hew the trees for want of the ax, saw, chisel, and auger. Iron is useless, for he can not distinguish it from the red clay, and he knows nothing of fire, except as he trembles before it in the volcano, or worships its counterfeit in the lightning. Glass does not exist, nor does nature furnish any model which would suggest it. The beasts are all armed, while man is not. Even the mountain goat and the ram master him, while the wild boar is a terror. He flees for his life from the very patrimony which his children are to inherit

—from the cattle on a thousand hills, and the flocks and herds which are one day to be his own. The apple, known only in Siberia, is not yet a fruit, but a mere berry, and stings the mouth with its acrid flavor. The potato, known only in Brazil, is poison. Indian corn, unknown to Europe, Asia, or Africa, is an unnoticed Mexican weed, dwindling beside the spindling dahlia, in whose single whorl of colored leaves no botanist would foresee the present beautiful flower. Wheat was, perhaps, a bold and confident style of grass, which a few thousand years of culture in Egypt would develop into a valuable grain.* Even if it were fully equal to modern wheat it would be useless to our nomad, as he would not know how to grind or cook it. All things are so void of utility that only among the date groves, and naturally fruited jungles of Africa, could he survive long enough to learn the utilities of any thing.

94. Fewer Producers—Less Production.—But in this wretched nomad state, how are all values magnified! A bead, or an inch of cloth, would be worn around his neck to charm away evil spirits. A master, who would promise him protection from hourly danger, and furnish him a daily brisket of raw beef, would be hailed with the gratitude due to a descended god, loved as Friday loved Crusoe, adored as a dog adores his master. The richest boon he could desire would be well-fed slavery. He would kiss, as ornaments, those iron chains in which the philanthropy of later epochs, when money had become abundant, would see only degradation. In slavery begins his slow upward march, for at last he is a part of organized labor. Each day teaches him some new utility in metal, plant, flower, fruit, or animal. A million things become useful which either did not exist or were useless to him of old. The labor, that he would gladly have expended for a bead, would buy his successor a house. At first even labor is useless, for it has nothing to work with (tools), nothing to work for (motive), nothing to work upon (job or employment), and lacks the knowledge how to work (skill), except as snatching the things he would consume (appropriation) is work. Hence, though the world at no time needs so much labor as when man is in his savage state, yet there is no stage in which it is so little worth one's while to work, or when so large a proportion of men

* The student will emphasize the "perhaps." It is not meant here to affirm that any traces of an evolution from a less perfect form have yet been observed in wheat. On the contrary, history opens with wheat as perfect as to-day.

are idle, and despise work. Mr. Carey points out that, security being so much more important than fertility, cultivation begins in the high easily defensible positions, among the rocky cliffs, and on the poor soils. It is a sort of adjunct to the chief business, viz., intrenchment, fortification, and war. All arts begin with the poorest implements. Grain is pounded between two stones to make flour. Wool is spun first with the hand alone, then with a wheel. Sewing skins develops into weaving cloth, and the needle becomes a shuttle. Soon the canoe hoists a sail. Iron arrow-heads, tempered toward steel, supersede flint. As machinery takes the place of muscle, more men are willing to work, and the rewards of industry slowly begin to exceed the rewards of crime. Virtue, conscience, honor are born. As new and better soils, new and better implements, new and better sciences develop, man becomes free in body—in government—in social action. Steam engines are set to work printing books and drawing railway trains, and man the victor rides and reads by the toil of those same elements which at first he dreaded. The supply of the means of subsistence is on the whole greater in large and compact populations than in small and sparse, and greater in each country when its population is many than when it is few. In short, everywhere profits and wages depend on the activity and success with which human industry supplies all human wants. While in each individual enterprise, wages tends to obtain a continually increasing share of the joint product, in the aggregate of enterprises at any time existing, the division is made proximately even by the fact that capital and enterprise are continually on the lookout for new fields, in which, or new modes by which, the share of labor shall be relatively less, and that of profit more.

95. Wages Are also Capital.—Is the ascendency of capital over labor an accident of a particular period? Can it, by proper arrangements, be dispensed with? Or is it inherent in the nature of things, and therefore indispensable, except as the laborer may buy the capital that hires him.*

Bastiat says truly: "Sentimental philanthropists, who see in this a frightful inequality which they desire to get rid of by artificial, sometimes by unjust and violent means, do not consider that after all we can not change the nature of things. Anterior labor (capital) must necessarily have more security than present labor, simply for this reason, that products already created, must always present more certain resources than products which are as yet to be created; that services already rendered, received, and estimated, present a more solid foundation for the future than services which are still in the state of supply. If you are not surprised that of two fisher-

* "Harmonies of Political Economy," 377.

The instant that capital loses its power over labor, wages must lose their power over means of subsistence. Money, and wealth of every kind, in any form or quantity in which the laborer now seeks to possess them, must lose their power to command whatever comforts the laborer now commands by means of his wages. Capital and money being one thing, can only lose its power in the hands of him who has much of it, by simultaneously losing its power in the hands of him who has but little of it. The twenty-five cents,

---

men the one who, having long labored and saved, possesses lines, nets, boats, and some previous supply of fish, is more at ease as regards his future than the other, who has nothing but his willingness to take part in the work, why should you be astonished that the social order presents, to a certain extent, the same differences? In order to justify the envy, the jealousy, the absolute spitefulness, with which the laborer regards the capitalist, it would be necessary to conclude that the relative stability of the one is caused by the inability of the other. But it is the reverse which is true. It is precisely the capital which pre-exists in the hands of one man which is the guarantee of the wages of another, however insufficient that guarantee may appear. But for that capital the uncertainty of the laborer would be still greater and more striking. Would the increase, and the extension to all, of that uncertainty be any advantage to the laborer? . . . The questions which the workman ought to ask himself are not, 'Does my labor give me much? Does it give me little? Does it give me as much as it gives to another? Does it give me what I desire?' The questions he should ask himself are these: 'Does my labor give me less because I employ it in the service of the capitalist? Would it give me more if I worked in a state of isolation, or if I associated my labor with that of other men as destitute as myself? I am ill situated, but would I be better off were there no such thing as capital in the world? If the part which I obtain in consequence of my arrangement with capital is greater than that which I would obtain without that arrangement, what reason have I to complain? If it be indisputably established that the presence of capital is favorable to my interests, and that its absence would be death to me, am I very prudent or well advised in calumniating it, frightening it away, and forcing its dissipation or flight?' . . . Take the first workman you meet with on the streets of Paris—and thus address him. "We are about to annihilate capital and all its works; and I am going to place you in the midst of a hundred thousand acres of the most fertile land, which I shall give you in full property and possession, with every thing above and below ground. You will not be elbowed by any capitalists. You will have the full enjoyment of the four natural rights of hunting, fishing, reaping the fruits, and pasturing the land. True, you will have no capital; for if you had you would be in precisely the situation you censure in the case of others. But you will no longer have reason to complain of landlordism, capitalism, individualism, usurers, stock-jobbers, bankers, monopolists. The land will be absolutely and entirely yours. Think if you would like to accept this position.'

"This workman would no doubt imagine at first that he had obtained the fortune of a monarch. On reflection, however, he would probably say: 'Well, let us calculate. Even when a man possesses a hundred thousand acres of land, he must live. Now, how does the bread account stand in the two situations? At present I earn half a crown a day. At the present price of corn (wheat) I can have three bushels a week, just as if I myself sowed and reaped. Were I the proprietor of a hundred thousand acres of land, at the utmost I could not, without capital, produce three bushels of corn in two years, and in the interim I might die of famine. I shall therefore stick to my wages."

with which a laborer buys a meal, must lose its potency to induce the restaurant-keeper to sell the meal, at the same instant as the $25,000,000 with which a syndicate proposes to build a railway will lose its potency to induce laborers to work at the railway. The poor live by capital and wealth as well as the rich. To abolish the power of capital is to abolish the power of wages and put an end to all human association and co-operation.

CHAPTER VII.

LAND.

96. Values of Land.—Before labor can be perforned, or man can exist, there must be space for him to live and work in. This space will, by reason of the changes in the societary movement, be left in many places, as now at Icy Cape in Alaska, unsought for and utterly undesired. In those places all efforts at profitable production would, at least at first, result in loss, owing to the commodity produced being too far removed from the demand. In others every foot of available space is eagerly bought up and paid for. The title is taken of whomsoever will show the best chain of transfer from the first appropriator, accompanied by possession in the same chain of persons in whom the title has existed, from the first appropriator to the present holder. The rate, at which space will be paid for, depends upon the number and value of the uses which compete for its possession, and these in turn depend upon its location, or centrality, with reference to the social plexus, current, or sum of activities, which we call human society.

As we have heretofore seen, in our chapter on "Title and Use," all working and living space, or as it is usually styled land, is, in the contemplation of economic science, every moment exposed at auction to whomsoever will pay, or forego, more than any other for its possession. If he already possesses it, he foregoes what the highest bidder would offer him, in order to keep it. If he does not possess it, and desires it, he pays more than any other bidder to obtain it. All land, therefore, is at all times, except in so far as law may trammel its transfer, economically in possession of the highest bidder. The sum thus bid, for the possession of land, is called the value of the land, where land is purchased in fee, or by a title that is absolute except against the right of eminent domain by the state, and it is called economic rent, in communities where land is held by large proprietors, and occupied chiefly by tenants for terms of years. The value of land is the capitalization of its economic rent, or, in other words, the price at which it will sell is the principal, on which the sum,

obtainable for its annual rental, would bear the same ratio of percentage as the profits or interest obtainable for capital invested with equal security, and ease of return, bear to the sum invested.

The reasons why land bears its value, the causes which control its rise and fall in value ; the proportion in which the value of products, produced upon land, is divided, between the cost of the labor expended upon them (wages), the cost of the capital loaned for their production (interest), the cost of occupying the working space (rent), and the residue (profit) remaining to the undertaker of the industry (*entrepreneur*) are supposed, by some, to constitute the very substance of the science of political economy. The current of English discussion, from Ricardo to Mill, has connected rent with fertility, or the inherent productiveness of the soil, and has almost confined the discussion to agricultural land.* Rent, however, has almost nothing to do with

---

**Adam Smith* ("Wealth of Nations," Bk. i. Ch. xi., p. 67) says: "The rent of land not only varies with its fertility, whatever be its produce, but with its situation, whatever be its fertility." Dr. Smith seemed to hold that whatever the land produced more than was required to replace the stock (capital) employed in working it by a farmer and the ordinary rate of profit on capital, would go in rent to the landlord. But the notion that there is such a thing as an ordinary rate of profit on capital, is essentially visionary where some farmers will be losing their capital while others double it. But if there was an ordinary rate of profit on capital, then the capital invested by the landlord in the purchase of the land, and the capital invested by the tenant in working it, ought both to produce the same ordinary rate. But, in fact, such an "ordinary rate" nowhere exists. Dr. Smith again says (*ibid.*): "Such parts only of the produce of land can commonly be brought to market, of which the ordinary price is sufficient to replace the stock which must be employed in bringing them, together with its ordinary profits. If the ordinary price is more than this, the surplus part of it will naturally go to the rent of the land. If it is not more, though the commodity may be brought to market, it can afford no rent to the landlord. Whether the price is or is not more depends upon the demand."

If it was, in Dr. Smith's mind, a satisfactory solution of the reasons of the price of corn (wheat), to say that it depends upon the demand, why should it not have been an equally satisfactory explanation of the rate of rent of land to say that it depends on demand, and that the demand depends on the rate of profits on capital which the tenant expects to make by working it ? The rent is evidently that sum which the landlord will take for the use of land rather than run the risk of getting a less sum, and which the tenant will pay rather than forego the use of the land. Its average rate may depend on considerations connected with security from enemies in war, its healthfulness, its nearness to forts, mills, schools, commons, churches, fairs, factories, game, fish, stores, rivers, towns, forests, its improvements, its newness or oldness, its deposits of guano, gold dust, sea shells, coal, marl, lime, etc., or its availability for manufacture or exchange, its salt licks for cattle, its nests for birds, its sightly view, or the form in which the landlord will take his rent, whether in service, crops, or money, and even on the sentimental attachment the tenant may feel for it as his home, and the fact that his ancestors are buried there.

McCulloch (note to "Wealth of Nations") says: "The truth is that rent is entirely a consequence of the decreasing productiveness of the soils successively brought under

fertility, even in the case of agricultural land. In the case of residence, manufacturing, and commercial rents, the stars or the tides, the weather or the fashions, might claim an influence greater than fertility.

If a pageant will pass down Broadway at 1 P. M., continuing until five, a window fronting on Broadway, and previously of no value, will rent for perhaps $5 for the brief period while the

---

cultivation as society advances, or rather of the decreasing productiveness of the capitals successively applied to them."

The last statement is particularly unfortunate, as rent of land diminishes as we approach the frontier of civilization and of cultivation, yet the productiveness of the capitals applied to them increases, measured by the percentage along these frontiers, as the fact is that no one will there apply capital to cultivation at all, except where a high rate of return can be obtained on the small capital he usually applies. Moreover, a "decreasing productiveness of the soils successively brought under cultivation" is a totally unlike fact to the "decreasing productiveness of the capitals successively brought to bear on them." McCulloch, therefore, contradicts in the last half of the sentence the criterion laid down in the first half.

Ricardo says: "Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil. On the first settling of a country in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population, or indeed can be cultivated with the capital which the population can command, there will be no rent; for no one would pay for the use of the land where there was an abundant quantity not yet appropriated, and therefore at the disposal of whoever might choose to cultivate it." Ricardo's Works, by McCulloch, pp. 38-39.

Even this statement is not true in principle, since, however small the population might be, if it contained only two persons there would be a liability that these two might both desire the same spot, and if so it would have a value for which the person out of possession might be willing to pay, and this payment would be a price paid for space, of which rent is the annual equivalent. In the fairs held in savage lands the booths acquire a rent value. The fact that abundance of unoccupied land exists does not preclude a competition for the possession of the occupied, and this gives rise to rent. Ricardo further says (*ibid.*):

"On the common principles of supply and demand, no rent could be paid for such land, for the reason stated why nothing is given for the use of air and water, or for any other of the gifts of nature which exist in boundless quantity."

This also is an error, since *land having a particular location* never exists except in one limited quantity. It can not be duplicated. Suppose the very simple case of two savages fishing on adjoining rocks, one of which is only large enough for one person to stand upon. The savage standing on this rock is catching fish as fast as he can take them from the hook. The other can take none whatever. After enduring this several hours and taking no fish, the savage on the inferior location says to the savage on the superior location, "If you will surrender your rock to me, I will give you half the fish I catch while there." The offer is accepted and fish are caught there by the new man. The fish he pays for the rock are rent. Hence the presence of a continent of unappropriated land is utterly futile to prevent a payment for appropriated land.

Ricardo continues: "If all land had the same properties, if it were unlimited in quantity and uniform in quality, no charge could be made for its use, *unless where it possessed peculiar advantaegs of situation.*"

pageant is passing. The principle which governs the price of the window exactly defines all economic rent. It is a payment for space, which is competed for actively, because of its nearness to the societary movement, in which the tenant desires to participate. It is the pageant going down Broadway, and the competition between the many desirous to see it, that puts a rent on the window. Fertility is like the placing of chairs at the window. If

---

Precisely as *Karl Marx*, in treating of the cause of value, sets out by affirming that it is labor only, and then introduces the qualification of "socially necessary" labor, which changes the cause of value from labor to demand, so by a similar shift Ricardo, in the midst of his argument that fertility causes rent, qualifies it by saying, "except where location causes it." This really gives away his whole point. For if it depends on location relatively to the demand for its products, then it can not depend on fertility, since land having the right location can have its fertility supplied; but land, whatever its fertility, can not have its location changed relatively to population, except by changing the movement of population.

Ricardo further says (p. 36 ibid.):

"Thus suppose land—No. 1, 2, 3—to yield, with an equal employment of capital and labor, a net produce of 100, 90, and 80 quarters of corn. In a new country where there is an abundance of fertile land compared with the population, and where, therefore, it is only necessary to cultivate No. 1, the whole net produce will belong to the cultivator, and will be the profits of the stock which he advances."

What a bold assumption! The cultivator may give half his crop to some man with a lance or on horseback who protects him from savages. The first cultivators were non-fighting serfs and villeins, who paid rent in service chiefly that they might be protected by the military power of their lord from marauders and robbers, or at least might escape his own power to rob. They paid rent to power for security, and may have chosen, as Mr. Carey points out, the poor and thin lands near the baronial castle rather than the more fertile lands where less facilities would exist for safety. "Past, Present, and Future," by H. C. Carey.

Ricardo continues: "As soon as population had so far increased as to make it necessary to cultivate No. 2, from which ninety quarters only can be obtained after supporting the laborers, rent would commence on No. 1, for *either there must be two rates of profit on agricultural capital*, or ten quarters or the value of ten quarters must be withdrawn from the produce of No. 1 for some other purpose."

Here it will be seen Ricardo bases his whole notion of rent on the sublimely stupid generalization that there can not be two rates of profit on agricultural capital, whereas the truth would be more nearly that of the many capitals employed in agricultural production in any country no two derive the same rate of profit. Of course but one average rate can be arrived at by striking an equation among all the rates of profit on agricultural capitals, just as one average height for all men might be reached by dividing the aggregated height of all men among the total number of men. But thus having arrived at an average stature for all men, how absurd would it be to argue that "either there must be two grades of stature among men," or, etc. There are as many rates of profit among agricultural capitals as there are grades of stature among men, and hence through the vent furnished by Ricardo's own exception to his theory of rent the entire theory escapes.

Roscher, like Adam Smith, blends the two causes of rent, viz., fertility and favorable situation. He says ("Political Economy," by Lawler, Vol. ii. p. 14): "Rent is that portion of the regular net product of a piece of land which remains after deducting the wages of labor, and the interest on the capital usual in the country, incorporated into it. Hence it is the price paid for the using of the land itself, or what Ricardo calls the

the location is satisfactory, the seats will be brought there. If poor land has the right location, relatively to large populations, it will be so tilled as to make it fertile. In the hanging gardens of Babylon, soil, subsoil, and strata must all have been carried to the suspended structures. The land itself was brought to the location. The indestructible property of the soil, on which English economists have laid so much stress, was brought to the point where it was demanded, and there created.

97. True Cause of Rent.—MacLeod well says : "The only

---

original inexhaustible forces of the soil, which are capable of being appropriated. This price also depends, of course, on the relation between demand and supply; the demand in turn on the wants and means of payment of buyers, but the supply by no means on cost of production, which from the definitions above given is here unthinkable. However, land has this in common with other means of production, that its price (value) is mainly determined by that (aggregate value per acre) of its products." Again (p. 18) he says: "The favorable situation of a piece of land operates in almost every politico-economical respect in the same manner as its fertility. If a market to be fully supplied needs to be fed from a circuit of ten miles, the price must be sufficient to make good not only the other cost of production, but the freight over ten miles. Hence, therefore, all producers living nearer to the market, who have to obtain a smaller outlay for transportation, and yet obtain the same market price for their produce, make a profit exactly corresponding to the advantage of their situation."

The degree of stagnation in the European land-market, and especially the infrequency of sales of the estates of the great land-holders in England, seems to have wholly obscured to the European economists the view which makes land an investment of capital, as it is so generally regarded in America. As an investment of capital, rent is the effort of the owner to get a return on his investment, and it represents the sum the tenant is willing to pay for leave to use it as an implement of his industry.

Bastiat ("Harmonies Economiques," Ch. 9) considers rent as the interest on the capital laid out in bringing land under cultivation, and Hamilton in his report to the Congress on the manufactures of the United States, 1793, treats rent as the result of the capital employed in the purchase of land to produce an interest.

It is very certain that in the United States Hamilton's view, though deemed a vulgar error by Roscher ("Political Economy," Vol. ii. p. 21, note), is in harmony with the fact that rents of real estate, after deducting taxes, insurance, and charges for trouble of superintending real estate, conform very exactly to rates of interest on money—so exactly that there is no substantial difference economically between being the mortgagee to the full or nearly the full value of land, collecting interest on the loan, and being the landlord collecting the rent. The rate in both cases would be the same—showing that the principle which governs rents of real estate is the interest and profit which the capital invested in them would earn in other modes of investment. So MacLeod says (Vol. ii. "Econ. Phil." p. 21) that rent of land in England rarely exceeds 2½ to 3 per cent. on the value of land, whereas in the United States it is usually from 7 to 10 per cent. in newer and 3 to 6 in older communities.

Locke ("Considerations on the Lowering of Interest," Works, ii. 17, ff) maintains the close parallel between rent and interest. This may be truer, however, where land is freely exchanged into money, and *vice versa*, as in America, than where it is not.

John Stuart Mill ("Principles," Vol. i. p. 516) says: "The land is the principal of the natural agents which are capable of being appropriated, and the consideration paid for its use is called rent. Landed proprietors are the only class of any numbers or importance who have a claim to a share in the distribution of the produce, through

original and indestructible power the earth has is that of extent."* Fertility is as variable a property in soil, as health is in man. Soils in England which once produced five bushels of wheat per acre now produce fifty-five. Some in Indiana which once produced thirty bushels produce but seven. Location, with reference to the societary movement, is also a variable quantity, changing with every change in the societary movement. When the societary movement centred in Nineveh and Babylon, real estate was

---

their ownership of something which neither they nor any one else have produced. It is at once evident that rent is the effect of a monopoly—though the monopoly is a natural one which may be regulated, which may even be held as a trust for the community generally, but which cannot be prevented from existing. The reason why landholders are able to require rent for their land is that it is a commodity which many want, and which no one can obtain but from them."

This is not giving a definition of economic rent, but of private title or appropriation, which is the condition precedent to rent, as we have seen, and which rests in seizure or monopoly, and is not rent itself. To define rent, Mr. Mill should have explained why men pay high prices for the monopolized portion of land, when there is always at some place an unmonopolized supply in vast quantities to be had for nothing. Evidently, because they want not merely land, but land in a certain location. But why do they want land in this location? Because food when there produced can be sold at a profit on its cost of production. But why could it not in Patagonia or Siberia? Because of cost of transportation. Men pay rent then chiefly to avoid transportation on persons, goods, or customers. Mr. Mill's view of rent is crude and tinctured by his socialistic tendencies. To him rent is despotism, which may be mitigated in degree or amount, but when mitigated ever so much what remains is despotism.

A French writer, *M. de Fontenay* ("Du Revenu Foncier," p. 260) says: "It may be as well to say something here of one of the most striking instances of the advantages of position. I mean the high price paid for buying or hiring spaces in a great city. Some economists have thought they see in that the rent of land. They have let themselves be duped by a word, as Montaigne would say. To think that it is really for a piece of land that one pays in Paris two or three hundred francs the meter, is as if one were to think that in buying the number of a hackney coach, it is for three yellow numbers that he pays six to eight thousand francs—and that when a notary sells his practice, it is a double knob of gilt copper, twenty paper cases or so, five or six shabby tables, and a bad earthenware stove, that he sells for 500,000 francs. The space of ground, like the number, the practice, is only a representative sign of the acquired rights, a title to advantages and profits, which may be discounted. What one pays for, in the price of the space of ground, is a share in the enjoyment of innumerable improvements of an advanced civilization; it is an immense opportunity to exert oneself and to shine, to know and be known. It is a powerful agglomeration of rich consumers, if one is a producer; of producers and products of all kinds, if one is more especially a consumer. It is a multitude of free enjoyments—the pavement, the *trottoirs*, gas, water, *fetes*, theaters, palaces, walks, museums, shops, libraries, marts of all kinds of wealth, material and intellectual. The inhabitant of Paris, who gives up to a stranger his share in these advantages, has the perfect right to sell them to him at a good price. For it is he, or they, whose right he represents, the citizens of a great city who have gradually made it what it is. It is they who by their labor, their sacrifices, their struggles of every kind, by their gold as by their blood, have acquired and paid for these rights, this security, this progress, this public luxury, these works of general utility,

* "Principles of Economical Philosophy."

high there; now it is low. But it is solely with reference to this element, that rent, or value of land, rises or falls.

In point of fact, the one law which governs the value of real estate, in city or country, and whether to sell or to rent, is the same, viz.: Demand for it; *i. e.*, the number of possible, and profitable, uses which compete with each other for its occupation. Land is like an object put up at auction—its price depends on the number and intensity of the bidders, and these, in turn, on the variety and value of its utilities.

On the leading corners of a great city, say of Wall Street and Broadway, in New York, land attains its highest value, because

---

these refinements of civilization, this immense development of intellectual and material life."

Of the pretended distinction between profits of capital and interest on money and rent of land, De Fontenay says ("Du Revenu Foncier," p. 2): "We propose here to abolish these false distinctions, incompatible with the character of harmony and simplicity which the laws of economics ought to have, and to prove that there is one and only one law of value, income, and capital, under all its forms."

MacLeod ("Principles of Econ. Phil.," Vol. ii. p. 18) says: "Fontenay, in his remarkable volume on rent, has at least pointed out the fundamental fallacy of breaking up economic phenomena into separate classes and finding a separate law of value for each; and he has shown most irrefragably that rent, profit, and interest all proceed from the same cause—the excess of the value above the cost of production, which can only be affected by the intensity of the demand and the limitation of the supply."

Both Fontenay and MacLeod treat the Ricardo-Mill theory of rent as tending logically to the scheme of confiscating the rent of land by taxation, in which they preceded Henry George. Jevons, Sidgwick, Fawcett, and Bonamy Price adopt essentially the Mill-Ricardo theory of rent, viz., that it is a price paid for a choice of more productive over less productive lands, and that the amount which will be paid for the choice will be commensurate with the greater productiveness of the land, so that the landlord will get the entire value of the greater productiveness of the land, never once dividing the advantage of that greater productiveness with the tenant. But is it fair towards the tenant to suppose that, in looking for a better situated or more fertile farm, his hope of getting any of the advantage of its better situation, or fertility, is always a delusion? Why is it that the economists, who strenuously insist that an exchange profits both parties, lose sight of this principle wholly when they treat of the exchange which a tenant makes of money for the use of land? Whatever may be the advantages of its occupation for a year, and whether they arise from fertility or location, why will not the competition among landlords compel them to divide the value of this advantage, equally between themselves and their tenants, so that one-half of it should inure to the tenant and take the form of profits on his capital? Is it true that a tenant never has any interest in selecting a good, fertile, or well-located farm, over what he would have in selecting a poor one? He could have no such interest if it were true, as matter of economic law, that the landlord would get the entire difference in value as rent. And if there be such a law, concerning the rent of the one implement land, why should it not apply to all other implements and agencies which we hire and pay for? Does the best lawyer absorb, in fees, the whole difference between what his services are worth to his client and what his client could get those of the poorest lawyer in practice for? Does the best means of transportation, say the railway, absorb in freights the whole difference between what the shipper can get his products carried by rail for over what it

all those kinds of business in which most profit can be earned by the use of the smallest space, such as banking, stock brokerage, insurance, first-class law offices, bank note engravers, and managing offices of great corporations, compete with each other for its use, on account of the facilities it affords for dealing with a large number of people within a few hours of time. Land a little less valuable is taken for great hotels, newspaper and book publishing houses, importers' palaces, restaurants, and retailers of all grades. Land still less valuable answers for private residences, manufactures, storage, etc., the price of every lot, how-

---

would cost him for the slowest and worst means of transportation in use? Does the best equipped and most productive factory absorb, in its profits of manufacture, the whole difference between the value of the work it will do, and that which the poorest means of manufacture in use by man would accomplish ?

No one would answer any of these questions in the affirmative. As applied to the hire of lawyers' services, of railways as an implement of transportation, or of machinery as a means of manufacturing goods, the Ricardian law is not dreamed of. A lawyer can not charge according to the difference in the value, to his client, between his services and that of the worst lawyer in use, because that difference is not calculable or practicable, and because there are so many other competent lawyers competing with him, the result of whose services would have been the same as if he had been employed, that he is compelled to charge simply according to the labor-time, *i. e.*, the sum he could afford to take, rather than risk being unemployed, during the time required. Why then will not competition between farm owners compel them, like competition between lawyers, to hire out their farms solely with reference to the number of farms equally productive and well located, out of which a tenant can make as good an interest on his capital as on the farm in question, and out of which it is reasonably certain that some will not be rented? In that case it is not a question between the product of the best and worst lands in use which determines the rate of rent, but rivalry between the lands equally fertile and well situated, which shall escape a loss of return on the capital it represents, which is a motive of the same nature as the lawyer's effort to avoid losing his time, the railway's effort to avoid loss of traffic, the factory owner's competition with other factories for business, or the competition of merchants with each other for trade. No one supposes that the purchaser of any other commodity, than the use of land for a year, has no possible interest in the question whether he is buying a good or a poor commodity, as the difference in price which he will be charged will so exactly offset any difference in quality or advantage that the merchant and manufacturer will get it all, and the buyer will get none. Why, then, should this precise formula be supposed to apply to the purchase of a year's use of land? In fact, it is well known that in all classes of rentals, whether of land or city property, as the quality of the property rises, the rate of return the landlord can get for it falls, partly because on high class property the preservation of the quality of the property becomes a much more important consideration than the annual rent, and partly because the number of tenants capable of hiring first class property is much fewer than the number capable of hiring fifth class. Hence, a high class country residence on the Hudson River worth $100,000 would not ordinarily rent for more than four per cent. on its value. A residence of equal value in town might rent for five. If built in flats for families, it would rise to ten per cent., and tenement houses for laborers rent for 15 to 20 per cent.

But in saying that rents are graded according to the capital represented, it may be objected that we travel in a circle, as the capital represented is always based on the rents it yields. This is true, and in this sense all economic argument travels in a circle,

ever, being accurately determined by the number of possible and profitable uses which compete for its possession. Within a circuit of ten miles of the city, land has a suburban value so great that poor men can hardly afford to get an acre of it for floral and hot-house gardening. From ten to thirty miles from the city, gardening, however, prevails, and the labor of two or three men will be expended on from one to five acres of ground, so numerous and valuable are the crops it produces, under the high state of cultivation to which they bring it. From a grape vine, which occupies but two feet square of space, they pluck enormous clus-

---

since all the phenomena of value also travel in a perpetually varying circle, in which we are always measuring varying quantities, according to standards which themselves vary only a little less than the quantities they measure. We conclude that rents, in the infancy and origin of the relation of landlord and tenant, are like wages, too closely associated with the reign of military force to be graduated according to fertility of land. The land is given to the tenant as a reward for fighting for his lord in battle, and bravery is the thing his lord chiefly wishes to buy, and pay for, in land, while security and the protection of the clan, or baronial horde, is what the tenant seeks. Hence he takes land according to his faith in the prowess of his chief. As Fawcett says*: "Lands obtained by force had to be held by force; and before law had asserted her supremacy, and property was made secure, no baron was able to retain his possessions unless those who lived on his estates were prepared to defend them. There thus arose almost universally some personal relations between landlord and tenant, and the personal services which such a feudal tenure required formed a considerable part of the rent which was paid for the land."

In this condition of things, military security, as Carey says, would cause lands to be rented according to their inaccessibility, nearness to the baronial castle, or to ores from which armor could be made, and other elements of safety which would involve mountainous or hilly situations, and poor land would often first pay rent, not because of its poverty, but of its defensibility, and the form of rent paid would be per thrust and per blow, and not per acre or per bushel. Fawcett continues:

"As property became secure, and landlords felt that the power of the state would protect them in all the rights of property, every vestige of these feudal tenures was abolished, and the relation between landlord and tenant has become purely commercial." ("Manual of Pol. Econ.," p. 115.) If so, why can not the terms, on which the landlord sells the use of land, be stated according to the purely commercial formula, which certainly is the one applied when the capitalist, who desires to become a landlord, attempts to buy the title in fee to the land? The landlord then pays for the fee that sum which the previous owner would regard as calculated to procure for him a "larger quantity of the necessaries, conveniences, and comforts of life" than the title to the land itself would. The price is regulated according to the quantity of land about equally desirable then being offered in the market, and the number of purchasers seeking to buy. Land less desirable was wholly out of the competition. It was as far removed from the problem as stones are when one wants to buy bread, or as fence-rails are when one is looking for oranges. All land, at all times, depends for its money price, on the rates at which capital will seek investment in it. If capitals hold aloof from investment in land it must fall until they again buy. Hence the ultimate rates of rent must be the ordinary rates of profit on capital in business generally, at the time and place of renting the land, allowance being made for relative degrees of trouble involved in superintending the land, and prospects of rise of value by holding it.

* ("Manual of Political Economy," p. 115.)

ters, whose price would buy the product in wheat of an acre of land in Iowa. The same grapes could be raised in Iowa, so far as the soil is concerned, but only a large city furnishes a sufficient number of luxurious customers to create a market for fruit requiring such rare skill in its culture. From the next two feet square he plucks twenty pears, which sell at ten cents each, or $2. A plot of half an acre produces $500 worth of strawberries, no better than could be raised in Iowa, save that in Iowa they would have no market near enough to admit of transportation. So, within a circuit of twenty miles of a great city, a thousand crops compete with each other for the occupation of the soil, because near at hand a thousand customers compete with each other for those crops when raised. Nevertheless, the competition between grapes, pears, currants, strawberries, blackberries, cranberries, quinces, plums, etc., for the occupation of land is so much less valuable than the competition between bankers, brokers, lawyers and railroad presidents, that a year's rental of a room in a fourth story of a building on the corner of Wall and Broadway, is worth as much as the fee of an acre of land for gardening purposes, both ranging at from $500 to $1,000.

If we take the map of the United States, and draw around each large center of population a series of concentric rings, one series, for instance, around New York, another around Philadelphia, another for Boston, Chicago, New Orleans, and San Francisco, the successive areas bounded by these rings mark, as they recede from their centers, a rapid diminution in the number of uses to which the land may be put, and, consequently, of the competitors for its purchase, and of the value it bears. From five to ten miles from Chicago the land is gardening and suburban, and is worth, generally, several thousand dollars per acre. From ten to twenty it is chiefly small farming, and falls to from one to two hundred, except as it is raised by vicinity to new suburban centers of population, like Evanston, South Chicago, etc. At forty miles from Chicago it is available only for ordinary Western farming, which consists of raising live stock, dairy products, wheat, rye, corn, and other crops which put the product of a good many acres of land into small bulk, and small value for transportation to consumers, most of whom are one thousand miles away. Here the number of crops available, instead of being several hundred, as in gardening locations, is only four or five, and the production of those must be at the minimum of profit, because millions of farmers equally distant from a market are competing with each

other in producing the same crops. Hence, the value of land depends simply on the number of uses to which it can be put, owing to its nearness to the consumers of its products. Now, as at all times *far more increase in wealth takes the form of an increase in the values of lands than is found* in all other modes of profit combined, it follows that the growth of men and communities in wealth depends largely upon their nearness to, and cheapness of, communication with the consumers of their products.

98. Rent and Transportation.—It is singular that Mr. Mill should have stumbled upon the proposition that perfectly gratuitous transportation would annihilate rent,* without following it out to its obvious corollary that it is the cost of transportation to and from the lands that bear no rent, or a lower rent, that fixes the rate of rent that can be asked for those whose product involves less transportation ; in short, that rent is chiefly a price paid to avoid transportation.

In this point of view, rent is the centrifugal force, which disperses men from the centers toward which commerce and exchange attracts them, and obliges them to form new and smaller centers. As men go from the centers they avoid rent and land values, but lose and incur transportation. As men draw near the centers they save time and transportation, but increase rent. If there be some locations better adapted than others for production in any form, the highest economy of society, as a whole, requires that these locations which admit of a higher rate of production should fall into the possession and custody of those who will im-

---

* Mill, "Political Economy," Vol. i. p. 528, says : "The tendency of improved communications is to lower existing rents, by trenching on the monopoly of the land nearest to the places where large numbers of consumers are assembled. Roads and canals are not constructed to raise the values of the land which already supplies the markets, but (among other purposes) to cheapen the supply by letting in the produce of other and more distant lands ; and the more effectually this purpose is obtained, the lower rent will be. If we could imagine that the railways and canals of the United States, instead of only cheapening communication, did their business so effectually as to annihilate cost of carriage altogether, and enable the produce of Michigan to reach the market of New York as quickly and as cheaply as the produce of Long Island—the whole value of all the land of the United States (except such as lies convenient for building), would be annihilated ; or rather the best would only sell for the expense of clearing and the government tax of a dollar and a quarter per acre, since land in Michigan, equal to the best in the United States, may be had in unlimited abundance by that amount of outlay. But it is strange that Mr. Carey should think this fact inconsistent with the Ricardo theory of rent. Admitting all that he asserts, it is still true that, as long as there is land which yields no rent, the land which does yield rent does so in consequence of some advantage which it enjoys, in fertility or vicinity to markets, over the other, and the measure of its advantage is also the measure of its rent."

part to them the highest rate of production of which they admit. The economic force which provides most room for all, by obliging each to economize and curtail in the use of room, so as to occupy no more space than he can use to the best advantage, is rent. In agriculture, the chief need of society is that the land shall be used for the production of those crops of which there is most economic need, as shown by the degree of effective demand. Near to great centers of population, flowers, bulky vegetables, roots, fruits, and grass for hay, are most needed. At the least, the last-named item will continue to be among proxi-mural crops, as long as horses do most of the intra-mural transportation of large cities. Agricultural rents, therefore, reserve the land near the great cities for the bulky crops, in which a little ground worked over with great labor produces a more valuable, but less transportable return than is obtained from the great farms at a distance from the social centers. On the other hand, as we go out through Ohio, Illinois, and Iowa, and still more, as we reach Dakota and Wyoming, with every fall in the values of land, there is an increase in the degree in which extensive crop-raising takes the place of intensive, or in which that form of agriculture is followed, which derives products of smallest bulk from the largest area of land. Finally, in Buenos Ayres and Patagonia land is sold, not by the acre, but by the number of heads of cattle it contains, and these are estimated, not for their meat, but only for their hides and tallow.

Nor is there any variation in the economic law, which thus economizes space at the extremities, and that which does the same at the center. Everywhere it is expressed by saying that rent distributes working space according to the number and value of the uses that compete for its possession.

In the heart of a great city, a family occupies two rooms at a cost for rent of $8 per week, when four miles out toward the suburbs they could hire a cottage of six rooms for $4 per week, and by going out twelve or twenty miles they could hire an acre of land, a cottage of ten rooms, and fruit garden for perhaps $3 per week. If asked why they do not go where they can get more room for less rent, they answer, "What is economy to one family, may be waste, or loss, to another. Those of us who think we can incur the loss of time, and increase of transportation involved, and support ourselves in the short hours left in the day do so. But many of us could not keep our places, and lose the time and pay the fares, involved in so much daily travel to and fro."

Reverting now, from the social centers to the periphery, we find the same economic law. In Alaska, at Icy Cape, the sea-lion competes with the bear only, for the possession of land. This is anterior to the existence, in land, of any economic value. But when the fur and seal companies begin to compete with each other, it first attains a value, because two possible uses compete with each other, viz., taking bear and taking seals. But as it can not be cultivated, its value is small. Coming down to Saskatchawan, in Canada, wheat, buckwheat, and potatoes can be cultivated, and with five possible uses its value rises. In Minnesota ten grains, five grasses, and six root crops can all be cultivated, and successfully carried to consumers, without the cost of carriage consuming the entire price. Besides, cattle, sheep and hogs can now be grown upon it. Twenty-four uses compete for the land, and its value rises to from $20 to $50 per acre. Near St. Paul and Minneapolis small gardening, dairying, poultry raising, bee culture, fruit can be marketed, and thirty possible uses compete, and the value rises to $250 per acre. Then it is sought, if within two miles of the town, for residence and garden spaces but not for trade. Drawing nearer, it is sought for retail but not for wholesale—or for manufacturing, but not yet for exchanging or banking. With these competitions it rises to $100 a front foot, unimproved. So, as the competitions increase in their number and value, the value of the land rises, until, in the heart of the large cities, as high a price will be paid, for a few cubic feet of space, as would be paid in remote districts for a mile square.

99. Rent as a Balance to Transportation.—In no other way can the situations or locations in which most business is possible, be secured for those who have the requisite means, skill, prudence, and ability to do it. Even competing workers, in different countries, find their rents adjusted by the same economic law. In Iowa, farm-land rents for $3 an acre, in England for $25 an acre. The acre in Iowa will produce only twenty bushels of wheat, because its distance from market makes a hasty and cheap tillage, without fertilizers and with little labor, yield the largest return from a given capital. The acre in England, being nearer the market, can be profitably brought up to a higher state of tillage, averaging thirty bushels per acre. The wheat in Iowa is worth only seventy cents, because costs of transportation and handling, amounting to sixty cents, are necessary to get it to its consumer in Pennsylvania, New England, or Manchester, Eng-

land, where it is worth $1.30. Hence the Iowa farmer gets from his acre twenty bushels at seventy cents, or $14, out of which he pays $3 rent, leaving him $11. The English farmer gets $1.30 for thirty bushels, amounting to $39, out of which, if he pays $25 rent, he has $14. Supposing the English farmer to pay $3 per acre for fertilizers, which the Iowa farmer does not use, the final returns to both would present that perfect equalization of returns from capital and labor, toward which all investments and employments are constantly tending, but which they never exactly reach. On the other hand, suppose cost of transportation for the Iowa farmer to be diminished by thirty cents per bushel, he makes an advance in profits of $7 per acre, an event which the English tenant could only meet, either by getting a reduction in his rent, or labor, or an improvement in his crop.

The transportation tax of the Iowa farmer, by an economic law of unstable equilibrium, is thus held in a state of equality with the rent tax of the English tenant, allowance being made for the higher average rates of profit required on capital in Iowa than is necessary in England. Suppose the English farmer to pay $3 per acre for fertilizers, and that the Iowa farmer would manure his lands as highly, and raise their productive power to the same standard as that of the English farmer, if he got as good a price for his wheat, it would then follow that the tax of transportation which the Iowa farmer now pays is as follows:

Diminished product of 10 bu. per acre at $1.30 per bu.	$13.00
Diminished price of freight on 20 bu. 60c.	12.00
Total, ...	$25.00;

while the English farmer's tax on the production of the same value in corn is

Rent £5 per acre, ... $25.00;
or the equivalent of the Iowa farmer's tax for transportation.

Of course it is the fact that capital and labor, invested in wheat-growing in the Western States, do reap a larger profit-and-wage fund, than in the Eastern States and in England, that causes the line of cultivation to push further westward each year. But that this tends toward equalization, between English capital invested in wheat-raising, and American, is shown by the "Report of Read and Pell on American Agriculture," in which they assume that the Western wheat-grower gets his land gratis. They say:

	£	s.	d.
Cost of growing a quarter of wheat (480 lbs.) in the West including delivery to local depot	1	8	0
Freight to Chicago		6	8
Thence to New York		5	2
New York to Liverpool		4	9½
Handling in America (which may be avoided on through rates)		1	1
Liverpool charges		2	1
	1	17	9½

The estimate may possibly, ere long, be affected by a reduction in the freights from the farms to Chicago to the extent of one-half. Allowing a deduction on this head of 3*s.* 9*d.*, or about 6*d.* a bushel, the estimate would be brought down to 44*s.*, or, without Liverpool charges, to 42*s.* the quarter.

This report shows a clear cost, of $10.50 per quarter of eight bushels, to the American wheat-raiser, against which the English grower has to offset his rent of land and wages. If the English grower raises thirty-two bushels per acre, the local protection which he derives, on his thirty-two bushels, from the transportation tax on his American competitor, amounts to $42 per acre, less the wages he pays per acre for cultivation. If he pays £5 per acre rent, and $17 per acre wages, he is even with his American rival in his chances of profit.

The first merchants, in all countries, are peddlers. In this early period the value in the peddler's pack exceeds, perhaps, that in the land over which he travels.*

The peddler pays no rent, but takes all goods to his customers. When he opens his store, so that his customers may come to him, his rent rises pretty nearly in proportion to the amount of transportation he avoids, relatively to the number of sales made. The degree, in which it falls short of so rising, measures the profit he makes by the change from traveling to paying rent. The first manufacturers and artisans were traveling shoemakers, tailors, blacksmiths, tinners, spinners, and weavers, who went from house to house doing work for, or carrying it to their patrons. When they open a shop or factory, they save a large cost of transportation on their goods, machinery, and persons, and, as there are many competitors, all trying to make the same saving, the competition between them, for the possession of land, enables the landlord to charge them as rent a sum about equal to the average profits on capital when invested in land, and the remainder of his saving by transportation accrues to the manufacturer as his profit of substituting rent for transportation.

* In 1624, the site of the present city of New York and its suburbs was sold for $5. ("Condition of Nations," by Kolb, tr. by Streater, p. 803.) In 1815, Chicago was sold for £6 10*s.* About 1810, Cincinnati was sold for a horse. ("English Land and English Landlords," p. 283.)

100. Rent as a Dispersive Force on Population.—Essentially, therefore, rent is a natural social force operating to disperse population, and economize working space, by imposing a tax upon the occupation of the more valuable localities, proportionate to their value for working purposes. This tax is prevented from being a monopoly, in favor of the land-owning class, by the fact that the profits of capital invested in land-owning tend constantly toward equality with the profits on capital invested in other kinds of business. It is prevented also from oppressing the labor, or wages, of one part of the world, at the expense of another, by the fact that it is equably balanced, by an equivalent tax for transportation of persons and commodities, against those who seek to escape the rent-tax by locating at a distance from the social centers, but where the products of their industry are not in local demand. This tax of transportation is recorded in the reduced prices of products requiring transportation, at points distant from the centers of consumption or demand, as shown in the following table prepared by the Department of Agriculture. It shows the average production of corn per acre, and its cash value per acre, and average price per bushel at the place where grown, in eighteen Northern States, for 1865:

State.	Bushel per acre.	Cash value per bu.	Value per acre.
New Jersey	$42\frac{1}{3}$	$\$1.15\frac{1}{2}$	$48.89
Connecticut	$31\frac{1}{4}$	$1.22\frac{1}{2}$	38.28
Rhode Island	$31\frac{1}{2}$	$1.22\frac{1}{2}$	38.58
Massachusetts	$33\frac{1}{3}$	$1.10\frac{1}{2}$	36.83
Vermont	$43\frac{3}{4}$	$1,15\frac{1}{4}$	50.42
Maine	34	1.21	41.14
New Hampshire	33	$1.21\frac{1}{2}$	40.10
New York	24	.95	22.80
Pennsylvania	40	.80	32.00
Ohio	$41\frac{1}{2}$	$.44\frac{3}{7}$	18.43
Michigan	$38\frac{1}{2}$	$.60\frac{1}{9}$	23.14
Indiana	40 2-5	$.38\frac{7}{10}$	15.63
Illinois	$35\frac{1}{4}$	$.29\frac{1}{4}$	10.32
Wisconsin	$41\frac{1}{2}$	.46	19.09
Iowa	$42\frac{1}{2}$	.30	12.78
Minnesota	38	$.51\frac{1}{2}$	19.57
Nebraska	$46\frac{1}{2}$	.59	27.43
Kansas	41 1-6	.53	21.82

Illinois was in 1865 a corn-growing State, dependent largely on consumers east of the Alleghanies for the disposal of her surplus. From the value of her corn, therefore, was deducted the cost of

shipping from 800 to 1,200 miles, so much of it as was consumed in this country, while, from the portion consumed in Europe, there was deducted, relatively to its price in Europe, the cost of transporting it 3,000 miles. Hence her product in 1865, of 117,095,852 bushels averaged but $29^1/_4$ cents per bushel. Had her consumers been in the Northwest, she would have received the average price paid for New England corn, $1.20 per bushel. Her tax for transportation, therefore, was $90^3/_4$ cents per bushel, amounting on her entire crop to $105,473,856.06, or four times her actual returns for the crop. This tax is the all-controlling influence in determining the values of products in all parts of the United States, and, through its influence on the values of products, it determines the mode of tillage which will be pursued, and especially whether it will be such as to exhaust or enrich the soil.

101. Exhaustion of Soils.—Prof. Henry, the late eminent Secretary of the Smithsonian Institution, estimated "that more wealth was invested in our soil, in fertilizing matter, at the moment this continent was discovered by Columbus, than there is at present above the surface in improvements and all other investments. The fertility, which ages had accumulated upon its surface, has been the capital upon which the farmer has been drawing, with reckless prodigality, from the first settlement of the country."

The wastefulness of the chief part of Southern agriculture, deserted houses standing in the midst of exhausted plantations, which were once fertile, were formerly attributed to slavery. Both it and slavery were in harmony with the waste consisting in the export of the soil in the form of cotton, molasses, and tobacco. This, by keeping the country constantly burdened by an increasing poverty and debt, made the enslavement of the laborer seem a consequent necessity, since the work was too hard and the net returns too small to enable the planter voluntarily to pay wages. He was generally eighteen months in debt for the means to feed and clothe his family and servants, and had often hardly more purchased luxuries than many mechanics at the North earning three dollars a day.

But it is not so generally known that the Southern system of agriculture was only more wasteful of the soil than the Northern, in the degree that it was further removed from its markets. Wheat near Albany, New York, declined from an average yield of from 20 to 40 bushels per acre in 1775 to 16 to 20 bushels in 1785, to 12 to 15 bushels in 1815, while, by the State census of 1845, Albany

County gave $7^1/_2$ bushels per acre, Dutchess 5, Columbia 6, and Westchester 7. Wheat declined in Ohio, in the 50 years preceding 1860, from 30 to 15 bushels per acre, and five years later to an average of 13. Indian corn, in the same State, in the five years from 1850 to 1854, both inclusive, averaged 38.81 bushels to the acre, while in the next five it fell to 32.95 bushels, and in 1862 to 28.96 bushels.

That these are no necessary results of cultivation, is shown by the fact that Massachusetts, whose soil was originally as poor as that of any State, has so advanced in average fertility that it appears in the census of 1860 as producing the largest average crop of wheat to the acre—16 bushels—while Georgia produced the smallest average crop—5 bushels. Connecticut, originally a poor sandy State, but full of manufactures, must have greatly improved her soil to appear, in the same census, as producing the largest average crop of corn per acre—40 bushels—while South Carolina produced the smallest. The Ohio Agricultural Report of 1862, referring to the decline in the wheat-product in Ohio, and its advance in other countries, says: "The lowest average of wheat in any county in England is $34^1/_2$, and from that up to 50 bushels per acre. It is a historical fact that, within the past two hundred years, the best soils in England did not produce to exceed six bushels of wheat per acre." A like improvement is going on in the soils of France, Belgium, Holland, Prussia, and Northern Germany, and in much of China and Japan; a waste and decay in the soils of Mexico, most of the West India Islands, Brazil, India, since its possession by the English, Ireland, Portugal and Turkey. All of these are engaged in exporting the raw product of their soils for foreign consumption, while the countries in which soils are advancing in fertility, are those which export nothing until it is finished ready for the consumer.

The same improvement is occurring, for the same reason, in the horses, sheep, cattle, hogs, poultry, and other domestic animals in the manufacturing States, and the same deterioration in the breeds in the States purely agricultural.

Formerly the Illinois farmer went to England for improved breeds of cattle, horses, and hogs, and prized his Durhams, Devons, and Berkshires for their blood, while he passed heavy penal statutes and made it a crime to even drive cattle across the State from Texas. The latter spread contagion and death in his dreaded path; the former imparted beauty, growth, weight, and health to all the flocks with which his blood might mingle,

until at last it faded out among the inferior stocks of the prairies.

The order of agriculture rises in proportion to its nearness to its market of consumption, and declines as it is removed therefrom, and hence, soils increase in fertility as the producer and consumer take their place side by side, and decline as they are distant from each other. But the reason of this is, not so much, the withdrawal of the nutritive matters contained in the crop exported, as the fact that the farmer who is far removed from his market can not sell all the crops which he ought to raise in order to practice that fair rotation of the crops which would renovate, manure, and enrich the soil. Some plants grow principally from the atmosphere, and these enrich and restore soils. Others draw from the soil peculiar elements, as wheat drains it of silica and potassium.*

If, therefore, the preservation of the fertility of soils depends on the rotation of crops, and if a farmer distant from a market can find sale for only a few of the crops needed in practicing such rotation, here is a source of decline in fertility analogous to, but not entirely identical with, the deportation of the constituent elements of his soil in the crops he exports. For, if he sent his crops but ten miles, their elements might never return directly to his lands. But at a distance of ten miles from an adequate market of consumption he could raise clover on lands exhausted by wheat, and sell his hay, unbaled, for more than he could have sold the product of the same land in wheat. But the farmer fifty miles from his consumer of hay must bale it before he can send it, and if 100 miles distant he can only send it by water, baled, while if 250 miles distant he can not send it at all, the freights consuming the whole value. The grasses which ripen slowly through long periods are the best renovators. But if no return can be got for them they are merely pastured, *i. e.*, trodden underfoot and wasted. Besides these, a farmer whose market is near may raise root crops—the beet, turnip, and carrot which derive nearly their whole growth from the air, and hence restore ten-fold more to the soil in their tops than they extract from it for their tubers. By the fact that he can utilize his entire land, and need let none lie fallow or waste, such a farmer economizes his manures, and makes it a part of his system to restore to the soil, in manures, every part of its produce which is not sent to market in the form of butter, cheese, poultry, pork, and the like. The farmer of New

* See American Encyclopedia, Art. Agricultural Chemistry.

Jersey, with Philadelphia on his right and New York on his left, takes his choice of a thousand crops. The herder of South American pampas can not sell any grain, corn, or potatoes, and rarely even the flesh of his herds. He kills them, therefore, for their pelts and tallow, and leaves the meat for carrion. Of the price of his pelts and tallow in Liverpool, five thousand miles away, he pays nine-tenths as a transportation tax, and the other tenth supplies him with a plug of tobacco and a few pounds of sailor's hard tack each year, together with the satisfaction such a person will sometimes feel, in the thought that though he gets but little worth enjoying, what little he does get is imported, and must be, therefore, of the very best quality.

102. Values of Land Due to the Consumers of Land Products.—Demand being the cause of all value, it follows that the value of the farm lands, farm incomes, farm products, and wages for farm labor, must depend upon the immediate presence of a population engaged in other pursuits than farming, and chiefly in manufactures and who are, therefore, consumers of farm products. This has been well shown by Mr. J. R. Dodge, statistician of the American Department of Agriculture. He divides the States into four classes, with reference to their proportions of consumers to producers of farm products. All States having less than 30 per cent. of agricultural workers, and seven-tenths of whose population are in other industries, are placed in the first class. These are necessarily distributed among the most diverse kinds of industries, and are subjected to the greatest activity of the societary movement.

All States having less than 50 per cent. of agriculturists and more than 30 are put in the second class. Those having more than 50 and less than 70 per cent. are placed in the third class; and those having 70 per cent. and upwards of farmers are in the fourth.

For instance, Virginia and Pennsylvania have nearly equal natural fertility, and essentially the same natural characteristics, stretching in the same way across the same chain of mountains from the Atlantic to the Great Valley of the Ohio River. Virginia in 1880 had 51.41 per cent., or a trifle more than half of her people engaged in agriculture. The value of her farm lands was $10.89 per acre. Pennsylvania, owing to her large mining and manufacturing, banking, and railroading, populations had only 21 per cent. of her workers employed in farming, and her farm-lands were worth $49.30 per acre. Of course, her lands not de-

voted to farming, but to uses with which farming could not compete, were worth very much more. Even her mountain and timber lands, which in Virginia would be abandoned as waste, were made valuable by great populations seeking to utilize their ores, rocks, streams, and timber.

Illinois had 43.65 per cent. of her workers in agriculture, and her farm lands were valued at $31.87 per acre. Iowa had 57.46 per cent. of farmers, and her farm lands were worth $22.92 per acre. In the whole United States the result is as follows :

TABLE NO. 1.

Classes.	No States and Territories.	Acres.	Value.	Value per Acre.	Per cent. of workers in agriculture.
1st Class...	15	77,250,742	$2,985,641,197	$38 05	18
2d Class.....	13	112,321,257	3,430,915,677	30 55	42
3d Class	13	237,873,040	3,212,108,970	13 53	58
4th Class.....	6	108,636,796	562,434,842	5 18	77

In the diagram, page 259, Mr. Dodge exhibits the value per acre, of each class, as four pyramids combined upon one base, that stands for the entire volume of American industry.

The diagram page 260 exhibits, in like manner, the relative values of farm incomes, in States where consumers of farmers' products preponderate over competitors in their production, as represented in the second table.

That the values of space, in which to produce crops, are gauged accurately, according to the market value producible within such space, appears from the following, showing the value of the products in the aggregate and per capita which gives rise to this higher value in the land.

TABLE NO. 2.

Classes.	No. engaged in Agriculture.	Value of Products of Agriculture.	Value per Capita.	Proportion Workers in agriculture, per cent.
First Class.....	1,060,681	$484,770,797	$457	18
Second Class. ...	1,566,875	616,850,959	394	42
Third Class.....	3,017,071	786,681,420	261	58
Fourth Class...	2,024,966	324,237,751	160	77

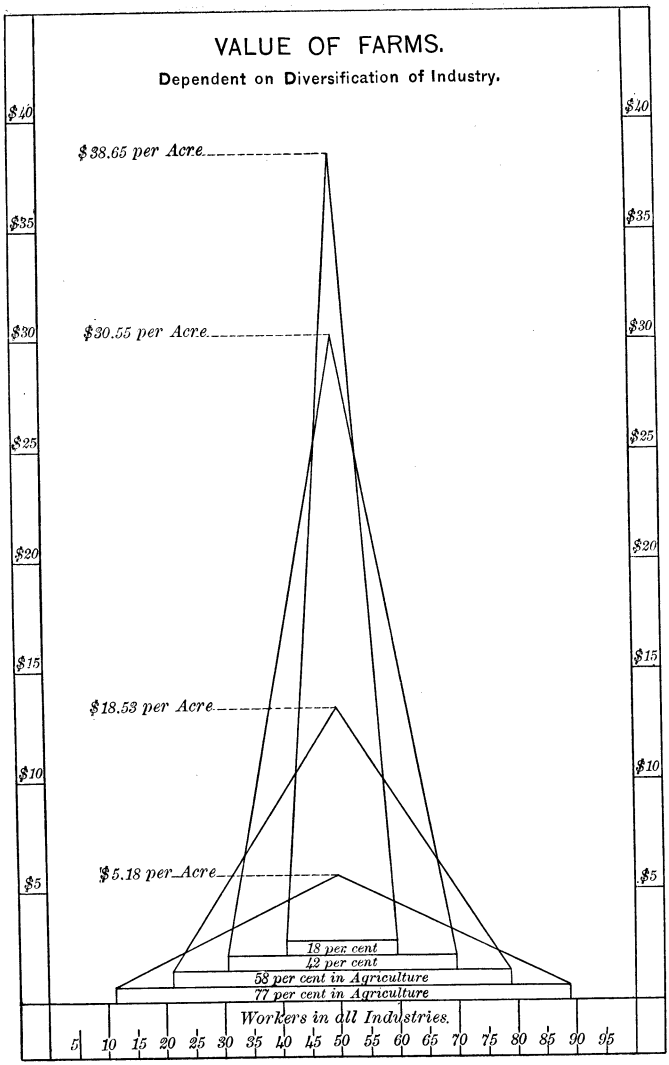
That the value, both of the land, and its products, is determined by the demand for them, is shown by the fact that, though the land of Illinois and Iowa averages far better and more fertile by nature than that of New York, Pennsylvania, and New Jersey, yet the farming land, which in Iowa is worth only $22 per acre, rises in New York to $44.41 per acre, in Pennsylvania to $49.30

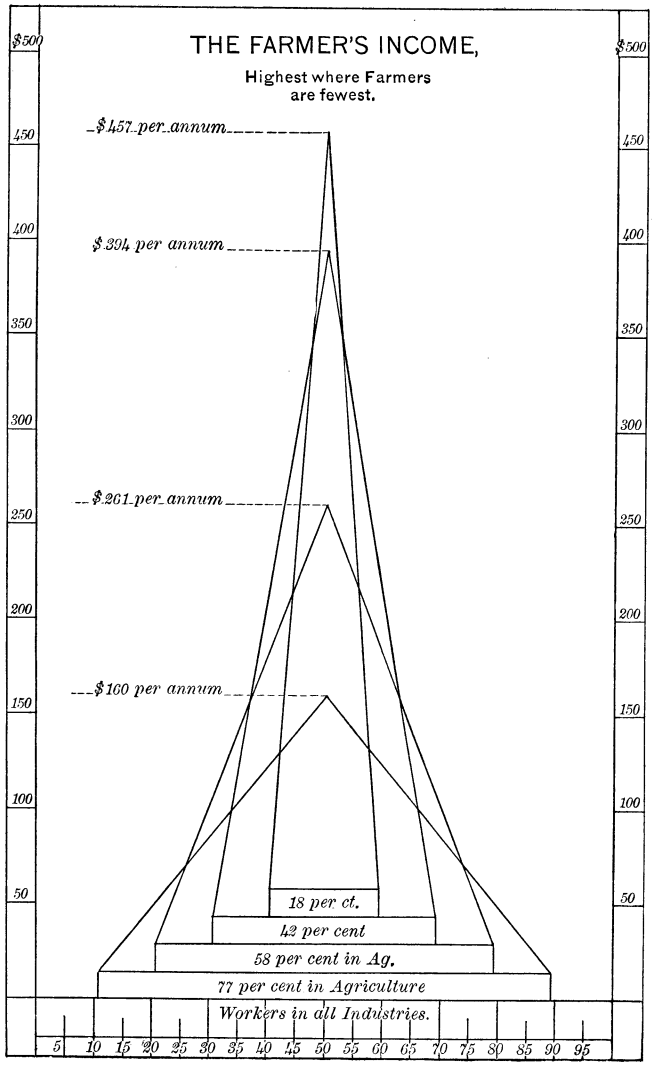
per acre, and in New Jersey, a country of primeval rocks and sand, to $65.16 per acre. New Jersey lies between the two great cities of New York, embracing, with its suburbs, 4,000,000 people, and Philadelphia and suburbs, embracing more than a million more. This focuses upon New Jersey a demand for food nearly as intense as is felt in any part of Europe, and affords an inducement to the most intense cultivation of the soil. One hundred feet square of land, devoted to the culture of Gen. Jaqueminot or Princess Alice roses, may produce roses to the value of $8,000 per year, or at the rate of $32,000 per acre. These, however, could only find market near a center of population so large as to contain some persons who would think it not wasteful to expend $10,000 on the flowers for a single ball. Strawberries also can be produced in a manner to reap from a quarter acre of land a larger return, and expend upon it more labor and capital, also, than would often be expended upon or gathered from a quarter section in the Western States. Owing to the intensive system of agriculture thus practiced, land rises in fertility in the States where markets are near and high, instead of declining by exhaustion, as it usually does when farming spreads a little labor over large areas.

The States of the fourth class include North Carolina, South Carolina, Georgia, Alabama and Mississippi, and have in all 108,637,796 acres of farm lands. The proportion engaged in agriculture is $77^{46}/_{100}$ per cent., the balance being chiefly in transportation, professional service, and trade, with very little manufactures, mechanics, banking, or commerce.

The social movement here is slow and stagnant. No large cities, capable of diversified or intense demand, exist. Industry, until twenty years ago, had been mostly carried on by forced labor, instead of under the inducement, to the workers, of either wages or profits. Through all these causes the average value of the farm lands is only $5.28 per acre. The low price of farm lands indicates that they are near to the margin of cultivation, and, in fact, vast quantities of land in these States lie uncultivated, because they are far away from that demand which alone could give value to their products. And except as their products have value, no values can be reflected from their products upon their labor and land.

In the second table we see that the product of agriculture per man falls as the percentage of persons engaged in agriculture rises. This is another way of saying that the product falls as the


VALUE OF FARMS.
Dependent on Diversification of Industry.
$40
$35
$30
$25
$20
$15
$10
$5
$38.65 per Acre
$30.55 per Acre
$18.53 per Acre
$5.18 per Acre
18 per cent
42 per cent
58 per cent in Agriculture
77 per cent in Agriculture
Workers in all Industries.
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95


THE FARMER'S INCOME,
Highest where Farmers are fewest.
$500
450
400
350
300
250
200
150
100
50
$457 per annum
$394 per annum
$261 per annum
$160 per annum
18 per ct.
42 per cent
58 per cent in Ag.
77 per cent in Agriculture
Workers in all Industries.
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95

demand falls, for one who produces agricultural products, can not form any part of the demand for the products he produces. An extremely slight demand may arise on the part of those who confine themselves to producing one crop, for a crop which they do not produce, as the cotton planters of the South formerly thought it cheaper to buy the "hog and hominy" on which they fed their slaves, in Illinois. But the true market of the farmer is not reached except in the manufacturer, as the manufacturer's chief market is the farming population. Hence, the demand for the products of States of the fourth class is chiefly from 1,000 to 3,000 miles from the point of production.

In the manufacturing States, 1,060,000 farm workers get $484,-770,797 per annum for their products, while in the agricultural States 2,024,866 farm workers get for their products only $325,-099,388. Comparing the States which make up these four classes, we find the average value of production for each farmer and farm laborer is $431 for Pennsylvania, $501 in New Jersey, $467 in Illinois, $394 in Ohio, $376 in Minnesota, $199 in Kentucky, $180 in Virginia, and $178 in Mississippi. If returns upon capital invested were considered, as a rule, those making the smallest return to each worker would be found returning the largest percentage on the capital invested. For where population is sparse, capital scarce, and the returns precarious, there capital is slow in being "turned over," but exacts a high rate of profit on each "turn over," or investment it gets, as labor also exacts a high wage in proportion to the value of its product. Hence, rates of interest are high, the nominal rate of profit on capital is high, and wages are high in the sparse districts, relatively to the value of the product, but as production is slow, when these rates of capital, interest, and wages are spread over a given period of time, instead of over a given value of product, they become low, relatively to those prevailing in a country of more diversified activities, where capital can be turned over oftener, where loans are better secured and more promptly paid, and where labor can be more continuously employed, and the value of its product, per year, is greater.

The average rates of wages in the period of depression in 1879, and the normal rates of 1882, for the groups of States as heretofore classified, not only show the effect of unemployed labor in reducing prices, but present fairly the differences in the several groups, the distinctively agricultural class showing the lowest rate :

	1882.		1879.	
CLASSES.	With Board.	Without Board.	With Board.	Without Board.
1st.	$24.14	$15.10	$21.31	$13.10
2nd.	23.51	16.93	21.13	13.45
3d.	19.51	13.04	16 84	11.03
4th.	13.67	9.24	12.01	8.15

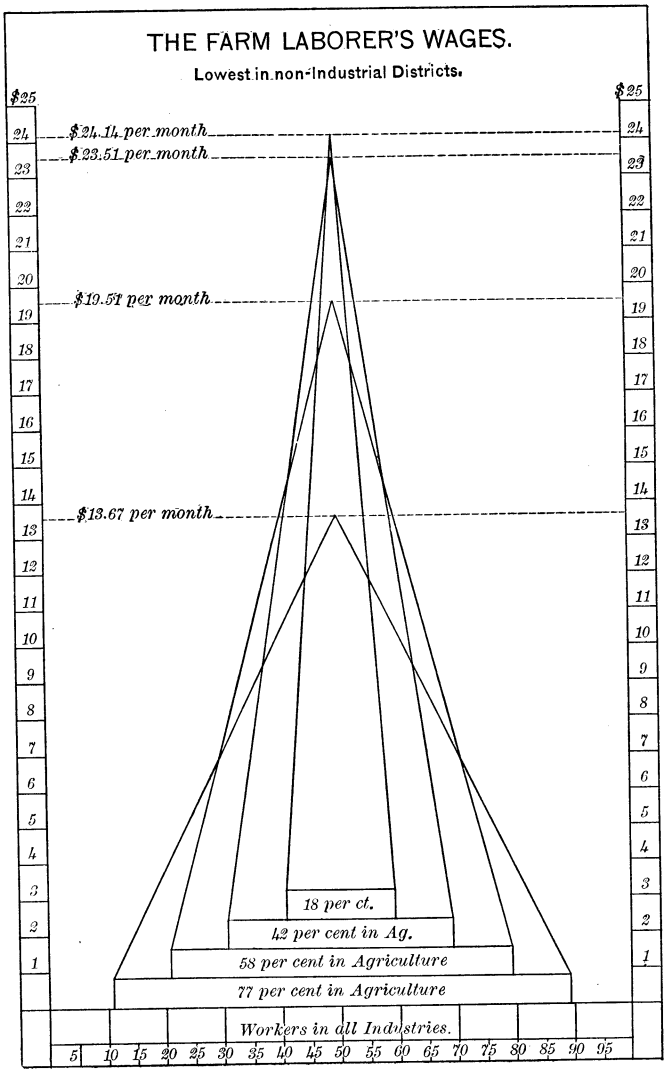
The diagram opposite exhibits the relative rates of wages paid for farm labor in States having many consumers and few producers of farm products, compared with rates of wages in the same capacity in States where these conditions are reversed.*

103. Machinery in Farming.—Intensive farming, as carried on near great markets, tends toward small farms fenced into small lots, and the expenditure of much labor over small areas, the use of many fertilizers, and the increase in the fertility of the land. Extensive farming, as carried on at a great distance from markets of consumption, tends toward the greater substitution of machinery for hand labor, and the cultivation of large tracts of land to one crop and under one ownership, and of fewer crops by one farmer. Finally, in Dakota, Wyoming, New Mexico, and parts of California, this system culminates in the great bonanza farms, where a life more like that of the factory, the mine, the fur-station, or the whale-ship, supersedes the home life of the farm. A large force of men are temporarily hired during the busy season, who, when that is over, leave the vast estate in the hands of a few resident keepers for the winter. Whether this feature of the bonanza farms is permanent or temporary it may yet be too early to predict.

The chief method in all extensive farming is to till the largest area, at the greatest saving of labor, for the crop that will bear greatest transportation with least deduction from its value. This necessity has given rise to the two classes of machinery in which the American inventors have won special eminence, viz., means of transportation and of rapid cultivation.

The introduction of this new machinery in agriculture, has had the same economic effect in superseding hand labor, as it has had in the factories of Europe. In the census report of 1860, under the head of agriculture, attention was called to the fact that the introduction of locomotives on railways had greatly increased the demand for horses, since in taking possession of the

* Mr. Dodge has carried out the same comparison to the agricultural and manufacturing counties in each State with like results. See "Farm and Factory," by J. R. Dodge.


THE FARM LABORER'S WAGES.
Lowest in non-Industrial Districts.
$25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
$24.14 per month
$23.51 per month
$19.54 per month
$13.67 per month
18 per ct.
42 per cent in Ag.
58 per cent in Agriculture
77 per cent in Agriculture
Workers in all Industries.
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95

larger routes of travel, on which it superseded the horse, it greatly multiplied the number of shorter routes on which horses are still necessary. But Mr. Moody is of the opinion * that should steam be successfully applied to common roads, and streets, and general farm work, it may yet supersede the horse instead of increasing the demand for him.

The first patent issued in the United States after the organization of the patent office was in June 1797, to Charles Newbold, of Burlington, New Jersey, for a cast-iron plow which combined the mold-board share and land-side all in one casting. During the early part of the present century, however, the plow most in use was of wood, iron-shod, large, ill-shaped and cumbersome, drawn by from one to six yoke of oxen, requiring one and often two men at the handles, another to ride on the beam to keep it in the ground, another to keep it clear, and several drivers for the oxen, often four and six, but never less than two, to turn one acre a day.† Successive improvements in the cast-iron plow were made in 1810 by Josiah Ducher, of New York, in 1814 by Jethro Wood, of Scipio, New York, and in 1836 the implement was brought to a degree of perfection by Joel Nourse, of Worcester, Massachusetts. One man with a single horse will now plow two and a half acres in light soils, and with two horses, by means of the sulky attachment, will ride while driving, breaking two-and-a-half acres of prairie per day. With a gang plow one man and two horses will plow five acres a day, a saving as compared with our first example of ten men plowing one acre, amounting to forty-nine men out of fifty required to do the same work. One man, with a cultivator and a pair of horses, works one acre of corn per hour, whereas he would formerly, with a hoe, work half an acre in a long and hard day, thus saving the labor of nineteen-twentieths of the men formerly required to cultivate corn.

The first American patent for harvesting grain issued in May 1803, to French and Hawkins, of New Jersey, was followed by mowers, cutters and threshers in endless number. In 1828, Samuel Lane, of Hallowell, Maine, patented a machine for cutting, gathering and threshing grain in one operation. The Hussey Machine,‡ in 1833, cut as fast as eight men could bind. In 1834, Cyrus H. McCormick, of Virginia, patented his first reaper for cutting grain of all kinds. In 1836, Moore & Haskell provided

* "Land and Labor," by Wm. Godwin Moody, p. 17. † ibid. p. 20.

‡ Obed Hussey, Cincinnati, Ohio.

one which would cut, thresh and winnow the grain at once. In 1860 one man with four horses would cut twenty acres a day. Now machines are used whereby one man and team, travelling three miles per hour, will cut eighty acres in ten hours, or as much as could be done by 320 men with sickles. Formerly threshing out a few hundred bushels of grain, with a flail, would fill up a farmer's leisure days throughout the winter. Now the steam thresher threshes, winnows and sacks the grain as fast as twelve or fifteen men can feed the machines and clear away the straw—turning out 1,000 to 1,500 bushels a day. In California, machines are used which find the grain standing, and leave it in sacks, combining the cutting, threshing and winnowing in one operation, and putting it in sacks in another. Formerly men took the ripened ear of Indian corn from the stalk by hand and husked. Now a machine drawn by two horses picks off the ear, gathering all the ears whether the stalks stand up or are bent down, husks as fast as eight men, leaves all the husks on the stalk, and does not pull up or cut up or break down the stalks. Forty years ago, by scraping an ear of Indian corn across the end of a shovel, on which the worker was sitting, he would shell from five to twenty bushels a day. Now two men, with a cornsheller, shell twenty-four bushels an hour, or with the three classes of horse-power shellers, four men will shell 1,500, 2,000 and 3,000 bushels per day respectively ; one man doing the work of 75, 100 or 150 men. Formerly the farmer paid a toll of an eighth or a tenth to get his grain ground. Now the mills run so automatically, that little more than a watcher at night with his lantern is needed, and the cost per bushel is hardly appreciable.

104. Effects of Releasing Labor by Machinery.—A vast force of persons are thus released from the labor of producing food, for one is enabled to produce as much as scores can consume. Some persons see, in these facts, a reason for alleged stagnations in industry and increased difficulty in obtaining employment.* But before rushing passionately to such a conclusion, there should be a very careful analysis of the fact that formerly nearly every person's occupation had to do almost directly with the visible creation of food, clothing or shelter. Now vast numbers of industries, employing millions of persons in all, are not directly, and many are not even indirectly, connected with either of these. In the United States half a million persons are creating transporta-

* Moody on "Land and Labor," p. 30.

tion by railway, an employment which sixty years ago did not exist. A vast number more are creating intelligence through books and newspapers, a large daily newspaper involving each day some part of the time of 1,000 persons. Hardly did such an occupation then exist. Others by thousands are creating pianos, organs and other musical instruments, an occupation which did not then exist. Others are making works of art, especially photographs, electrotypes, chromos and cartoons—furnishing people with insurance against every known calamity, and indemnifying widows and orphans against pecuniary loss by the death of those on whom they are dependent. Others are transmitting intelligence by electricity, tending power looms, constructing public parks, making matches, India-rubber articles, gutta percha, celluloid, and a thousand things then unknown, from materials not then discovered. Others are obtaining petroleum and refining it, or collecting and transmitting instantaneously to Washington the data from which the weather bureau determines what the weather will be, forty-eight hours ahead, in all parts of the country.

With such a vast and complicated army of new employments, and with the visible spectacle before us hourly of almost our entire population, young and old, poor and rich, able and infirm, working steadily all the time, and at least as industriously as before these labor-saving appliances were introduced, it would be a rash generalization to say that the means of employment had in any degree lessened. In fact it accords far more consistently with the incessant industry we continue to see among all classes and conditions of men, to revert to the well-known law, heretofore referred to, that the satisfaction of a lower want only begets the desire for not merely one, but for many, higher wants. If the wants of mankind multiply in geometrical ratio, in proportion as they are satisfied in arithmetical ratio, if as our wants are met, our ambitions expand, how is it possible to base a theory of the suspension of employment, for any human being, on an increase, however great, in the multiplication of the means of satisfaction ?

It is supposed that the quantity of sewing, which ladies now put upon their gowns and other apparel, has been multiplied in a degree fully equal to the increased economy with which the same amount of sewing can now be done by the machine. Meanwhile, however, millions of persons have found employment in the new industries connected with the manufacture and trade in sewing

machines. So, relatively to the absence of all means of transportation formerly existing, the manufacture of iron and steel for railways, of cars and locomotives, is a new industry.

So the vast increase in the quantities of paper, furs, silks, plate glass, watches, jewelry, bijouterie, books, furniture, capacious residences, oil paintings and higher engravings, standard libraries, and the like, involve an immeasurable increase in the need for human labor. Moreover they minister to enjoyments of a kind to which few could then aspire, but which are now open to the millions without reserve.

By reason of the cheapness, with which this extensive introduction of machinery has enabled American farmers to produce agricultural products, the sophistry is sometimes indulged in, by politicians, that dear human labor can underwork cheap human labor. American agricultural products, in the production of which dear human labor participates, do undersell European agricultural products, which are almost wholly produced by cheap human labor, unaided by machinery. In many parts of Europe, and even in parts of Great Britain, wheat is still planted by hand-sowing and reaped with a sickle. This competition is not however between dear and cheap human labor, but between human labor kept dear by the utilization of machinery, or perhaps between machinery itself, and cheap labor.

105. Tenant Farms and Large Holdings in America.—The census of 1880 showed that of a total of 4,008,907 farms in the United States, 1,024,701, or more than one in four, were tenant farms. Estimating the number to have increased with the subsequent growth of population to one and one-quarter millions, it far outnumbers the total number of holdings in Great Britain and Ireland, which now amount to 1,069,827. From 1870 to 1880 also the number of farms containing over 500 and less than 1,000 acres grew from 15,873 to 75,972, and the number containing more than 1,000 acres rose from 3,720 to 28,578. Simultaneously with this tendency toward large farming, and as a part of it, there has been an application of very large capitals to farming, not merely in the purchase of agricultural implements adapted to extensive tillage, but in a general elevation of the breeds of sheep, horses, and cows by the substitution of the best English blooded stock for the mongrel breeds. The tendency during this decade was to make blooded stocks very general, whereas, previously, they had been the hobby of a few only of the more aristocratic farmers, who were looked upon as farming more for taste and

pleasure than for profits. Farmers generally have awakened to a keen sense of the fact that the blooded stocks are by far the more profitable, and that large capitals can nowhere be used more profitably than in their dissemination.

Mr. Moody has written a fervid and denunciatory book ;* resembling in its rhetorical intemperance Mr. George's attacks upon land tenure,† Mr. Hudson's assault on railways,‡ Mr. Lockwood's indictment against the office of President,‖ and similar zealous productions. All these serve to mark that crude state of economic and political incandescence, in which our intellectual fuel expends itself with more of heat and smoke than of illumination. Mr. Moody would have us believe that the tendency towards large farms and tenant farming indicates a revival of villeinage, serfdom, and slavery, a view that is in harmony with his previously enunciated doctrines concerning the effect of the factory system and of machinery. The working of land, and the stock and capital necessary to run it, upon equal shares by labor is, however, usually a contract that is equitable to both parties. Mr. Moody, like many philanthropic men who treat economic subjects emotionally, mistakes the poverty, from which this form of contract is the tenant's best avenue of escape, for a poverty which the contract produces and perpetuates.§ Permission, to a man wholly without any fruits of past labor in his possession, to enter into possession of all the fruits of another's labor, of land which he has cleared, fenced, drained, ditched, supplied with orchards, implements, seeds, cattle, and herds, and by his labor to earn a title to half the profits which result, cannot be construed into cruelty successfully, so long as men retain the faculties essential to common sense. The fact, that in America tenants pay half the crop (or from one to two thirds), while in England rent is based on the proportion of a fourth of the crop, instead of establishing the case of hardship against the American tenant which Mr. Moody contends, shows simply that in countries of large capitals the value of capital declines relatively to that of labor, and that large landholders, holding many farms or estates for rental, are under the same economic necessity to rent them

* "Land and Labor," by Wm. Godwin Moody.

† "Progress and Poverty—Social Problems—The Land Question."

‡ "The Railways and the Republic," by James T. Hudson.

‖ "Abolition of the Presidency," by Henry C. Lockwood.

§ "The Displacement of Labor by Improvements in Machinery," by Wm. Godwin Moody.

low, as large money lenders are to lend at a lower rate of interest than small money lenders, as large manufacturers are to manufacture at a lower cost, as large carriers, by land or sea, are to carry at lower rates per ton per mile, etc. *

At the Cass, Cheney, and Alton farms near Fargo in Dakota, 290 men at the highest in summer, and six or eight in winter, working with thirteen seeders, thirty self-binding harvesters, and five straw-burning steam threshers for the Cass farm (6,355 acres), and with nineteen seeders, twenty-six self-binding harvesters, and four straw-burning steam threshers for the Cheney farm (5,200 acres), and with the same ratio of implements for the Alton farm (4,000 acres), are able to till, in wheat, 10,477 acres, lying contiguously, and to produce therefrom twenty-two bushels per acre, at a cost of about sixteen cents per bushel, and for a return of from seventy to ninety cents per bushel. The crop brings $161,065.80, of which four-fifths are profit, It is contrary to every sound principle of political economy to weep, wail, or indulge in denunciatory epithets, over the substitution of economies like these for the old methods of producing wheat, which maintain its

---

* NUMBER OF TENANT FARMS IN THE UNITED STATES BY CENSUS OF 1880.

	Money Rent.	*Share Rent.*		*Money Rent.*	*Share Rent.*
Alabama	22,888	40,761	Missouri	19,843	39,029
Arkansas	9,916	19,272	Montana	17	63
Arizona	42	59	Nebraska	1,943	9,476
California	3,209	3,915	Nevada	63	73
Colorado	165	419	New Hampshire	1,237	1,378
Connecticut	1,920	1,206	New Jersey	3,608	4,830
Dakota	72	606	New Mexico	22	386
Delaware	511	3,197	New York	18,124	21,748
District of Columbia	150	60	North Carolina	8,644	44,078
Florida	3,548	3,692	Ohio	14,834	32,793
Georgia	18,557	43,618	Oregon	748	1,538
Idaho	32	57	Pennsylvania	17,049	28,273
Illinois	20,620	59,624	Rhode Island	989	247
Indiana	8,582	37,468	South Carolina	21,974	25,245
Iowa	8,421	35,753	Tennessee	19,266	37,930
Kansas	4,438	18,213	Texas	12,089	53,379
Kentucky	16.824	27,203	Utah	60	373
Louisiana	6,669	10,337	Vermont	2,164	2,598
Maine	1,628	1,153	Virginia	13,392	21,594
Maryland	3,878	8,661	Washington	209	262
Massachusetts	2,292	848	West Virginia	4,292	7,709
Michigan	5,015	10,396	Wisconsin	3,719	8,449
Minnesota	1,251	7,202	Wyoming	5	8
Mississippi	17,440	27,118			
			United States	322,357	702,244

average cost at seventy cents. These farms are small compared with those of Dr. Glenn of California, who annually shipped to Liverpool wheat worth $1,000,000 a year in his own ships. On the Thompson and Kendall farm (Dakota), 1,600 acres of wheat, accurately estimated, involved a cost for production per acre of $8.69, and left a profit (in a selling price of seventy cents per bushel) of forty-nine cents per bushel, or $7.84 per acre, or $12,-544 for the 1,600 acres, producing only sixteen bushels per acre.

The economic value of these instances consists in the emphatic denial they afford to any general theories that the rate of profits on all industries are at any time lower than in previous epochs, or that they evince any general and universal tendency to decline. All such theories must be confined to specific cases or to single industries ; but it must always be implied that, at other places, or in other industries, new wells of profit are gushing forth at the old rate of several hundred or several thousand per cent., so that the average inducement to the human family, as a whole, to move forward to new fields of endeavor and of fortune-making, remains an essentially constant quantity. The Grandin, Dalrymple, and Glenn farms will, in a few years, have sunk to seven per cent. profits per annum, but the same rate per cent. will have broken out afresh, perhaps, in Borneo or in Tartary.

Measured merely by acres, the great land-holdings in the United States far exceed those in Great Britain,* and while some of our own large holdings † will be broken up, yet, so long as large

---

* SIZE OF ALL ENGLISH LAND-HOLDINGS OF MORE THAN 50,000 ACRES.

Names of Owners.		*Names of Owners.*	
Marquis of Ailesbury	55,051	Lord Londesborough	52,655
Duke of Beaufort	51,085	Earl of Lonsdale	67,950
" Bedford	87,507	Duke of Northumberland	191,480
Earl of Brownlow	57,799	Duke of Portland	55,259
" Carlisle	78,540	Earl of Powis	64,095
" Cawdor	51,538	Duke of Rutland	70,039
Duke of Cleveland	106,650	Lady Willoughby	59,912
Earl of Derby	56,598	Sir W. W. Wynn	91,032
Duke of Devonshire	148,629	Earl of Yarborough	55,370
Lord Leconfield	66,101		

† Says Moody, "Land and Labor in United States," p. 88: "But in the United States we have a saw maker, in Philadelphia, with his four million acres ; two butchers in California with their eight hundred thousand and more acres ; a cattle raiser in New Mexico with his seven hundred and fifty thousand acres ; and numbers of them in Texas whose acres are counted by hundreds of thousands. In the great Northwest the land-holdings for agricultural purposes—for grain, grass, and vegetables—by hundreds, range to fifty thousand acres and upwards, occupied by tenants or machinery, or by both. The whole country, from the Mississippi to the Pacific, is dotted—no, they

capitals can make the large rates of profit incident to "bonanza" farming which is above pointed out, the tendency to large holdings will increase. The objection urged to these large holdings is that they tend to differentiate society into capitalistic and proletariat grades, to "make the rich richer and the poor poorer" to create dominant or master classes on the one side and servile, landless, and dependent classes on the other. This objection applies, however, in the same sense to the advance from the hunter life to that of the herdsman. For, in hunting, there is no aristocracy of noble lords, who own the bows and arrows, and servile slaves who carry them. But, the instant herding begins, there are those who own the flocks and those who tend them. Still herding is less unequalizing than tilling the soil, for with this comes in the wide distinction between those who own the soil and those who do not. Most usually, in early periods, the former own the latter. Yet the inequalities created by agriculture are less than those created by trade and manufactures—for now society grades from millionaires to beggars. Thus, with each advance of society in activity, there is a continually increasing differentiation in ranks and grades of power, but it does not follow that the poor grow poorer at either of these advances, for it may happen that this increasing inequality is only an inequality in the degree in which all rise, but that none actually descend. This depends on whether the pauper and criminal, confessedly the lowest ranks in civilized life, are below or above what they would be in savage life. The real question is not whether the hired worker on a bonanza farm is better off than an independent farmer on a New England farm, for he may have neither the training nor capacity to be the latter. Men can be used, on the bonanza farms, of a training and capacity in farming far inferior to those which would be essential in a good Middle State farmer. But inferior men need a race in life, and an opportunity to live, as well as superior men. The real question is, whether the class of men who now hire on the bonanza farms, would be doing better if this employment were denied them. They are not profit-sharers, they do not bring their families—do not make permanent homes on the farms, and are less permanent than factory hands, as these are usually induced to stay if they will. But the fact that they seek

---

are not dots—is patched with these huge holdings. In comparison with the monopoly of the lands here shown, that of the English landlords appears quite insignificant. And yet we are only in the third decade of our movement."

this employment, at the wages offered, indicates that, relatively to any other field of labor open to them, it is the best.*

106. Large and Small Land-Holding in England.—The "Democratic Federation" of England, a leading socialist organization, says, in its manifesto: "Thirty thousand persons own the land of Great Britain against the thirty millions that are suffered to exist therein." Like erroneous statements on this point are frequently made. The census of 1883 shows in England 958,800 owners of land distributed as follows.† The landed aristocracy, all told, number 5,000 owners, and have a rent-roll of £30,000,000 annually out of a total rent-roll for all the land owners of England of £99,000,000, thus making the aristocracy the owners of less than a third of the rent-roll of England. Next to the aristocracy come 133,800 smaller rural proprietors, made up as follows, viz.: 4,800 owners with estates that average 700 acres, then come 32,000 with estates that average 200 acres, then 25,000 with estates that average 70 acres, and then 72,000 with estates that average 20 acres. All of these 133,800 rural proprietors enjoy a rent-roll amounting to £33,000,000, or one-tenth more than that of the aristocracy. Finally there come the urban proprietors, owning less than a fourth of an acre (four city lots) and suburban proprietors owning less than four acres, which two classes combined number 820,000 owners, and have an aggregate rent-roll of £36,000,000, or one-fifth more than the aristocracy. The landed proprietors are thus seen to have two classes of owners below the aristocracy, either of which, if property were represented in the House of Lords exactly according to its value, could outvote that aristocracy, which is now exclusively represented in the House of Lords. Rather the House of Lords consists of members of a class, comprising one-third of the land-owners in value, assuming to represent the other two-thirds.

While the total annual income of all the people of England is £1,300,000,000, the amount distributed in wages to the "workers" in the proper sense is, according to Mr. Giffin, £800,000,000. To workers who had less than £150 per year per family, according to Mr. Giffin, £620,000,000, according to Prof. Leoni Levi £450,-

---

* On the Grandin farm (Dakota), besides board, the wages are, from November 1st to March 31st, $15 per month; from April 1st to April 30th, $18; from May 1st to July 31st, $16; from August 1st to August 15th, $2 per day; from August 16th to September 15th, $1.50 per day; from September 16th to October 31st, $18 per month. (Moody on "Land and Labor," p. 47.)

† Mallock, "Property and Progress," p. 215.

000,000, and according to Mr. Hyndman, socialist, £300,000,000. Taking the estimate made by Mr. Giffin, £800,000,000, as correct, and we see a division between wages-workers on the one hand and all other classes combined on the other nearly equal. This is strikingly in harmony with the facts indicated in our chapters on Profits, and on Capital, as to the rates of division between capital and labor in the United States. It may yet be found to be a general law that labor and capital never effect so even a division of their joint product, between the owners of all the capital and the workers, or that labor never works so nearly "at the halves," as when the division is wholly unintentional.

The custody of the reproductive capital is so distributed that, according to Mulhall, 2,046,900 families of the upper and middle classes possess together property to the value of £7,562,000,000; but of these 222,500 families own £5,728,000,000. Averaging the first total over the larger number and they have £3,700 per family. Averaged over the smaller number they have £26,000 per family. Meanwhile there are 4,629,000 families which own only £398,000,000, or less than £90 per family. But while the average amount of capital owned by a working class family in England is only £86, the average income of the family is £100, or about 112 per cent. on its capital, the average income of those who have a thousand pounds is £260, or twenty-six per cent. on their total capital, and the average income of those who have £26,000 is £1,500, or about five per cent. on their capital. Thus the annual income of the rich is one-seventeenth of their wealth, the income of the middle class is one-quarter, and that of the working poor is ten or twelve per cent. more than the value of what they own.

Mr. Mallock * presents the following curious fact: In 1851 the gross income of the country was £620,000,000, of which the incomes of the rich (those having incomes of more than £150) were £200,000,000. To-day the gross amount of incomes under £100 is £620,000,000, whereas in 1843 they were £235,000,000, showing an increase of £385,000,000, or of £185,000,000 more than the total income of the richer classes in 1843. In other words, says Mallock, "the poorer classes to-day, are as a body, in precisely the same situation as they would have been in if at the time of the

* "Property and Progress," by W. H. Mallock, p. 179.

* "Property and Progress," p. 219.

first exhibition the income of every rich man then in the country had been made over to them in perpetuity."

These figures, of Mr. Mallock, may grow partly out of a more perfect or different mode of taking the census in later than in earlier years, or out of an expansion in the volume of currency whereby the same values are measured by larger numbers. The fact that the population of England has remained so nearly stationary, and that, notwithstanding the immense efforts made by its government, bankers, merchants, manufacturers, and in some cases its armies, to hold its foreign trade, the migration nearly equals the difference between its birth and death rate, does not quite bear out Mr. Mallock's argument.* Still, as it seems to be based on statistics honestly and intelligently handled, the student is entitled to the result and will make his own allowance for Mr. Mallock's supposed optimism.

107. Land in Ireland.—The causes of the depopulation of Ireland need a more careful analysis than can here be given, but the effects of that event upon land tenure and cultivation are appropriate in this chapter. In 1846 the population of Ireland was over 9,000,000,† and in 1883 it is slightly more than 4,500,000.‡ In 1841 there were 310,375 cotter holdings (tenancies) of under five acres; in 1861 there were 88, 083; and in 1880 there were but 64,292. Here were 246,083 small farms extinguished as homes, which must have contained at least one million, and probably nearer two millions, of people, whose labor had, in the main, reclaimed them from moor and waste. That neither the tenant system, nor the absentee landlords, were the cause of the depopulation of Ireland seems indicated by the fact that in the period from 1780 to 1810 Ireland had both, and yet grew in population from 5,000,000 to 8,000,000. In 1851, in a return which purported to distinguish "arable" land from "uncultivated," there were returned as "arable" 14,802,581 acres. In 1871 and 1881 the returns were as follows:

	1871. *Acres.*	1881. *Acres.*
Under crops, including meadow and grass,	10,071,285	10,075,424
Grass or pasture,	5,621,437	5,195,375
Bog, waste and water,	4,289,432	4,708,047

* The population in 1846 was 28,002,094, and in 1851 it was 27,393, 337.

† A M. Sullivan in *Nineteenth Century* for July, 1883.

‡ Mr. Sullivan says about 5,000,000.

The average yearly acreage under oats, between 1851 and 1860, had been 2,074,381 acres. In 1881 it had fallen to 1,392,365. Wheat acreage, in the like period, fell from 460,802 acres to 154,-009 ; barley from 221,150 to 210,152 ; turnips from 378,482 to 340,-097 ; potatoes from 1,039,921 to 854,294. Cabbage, alone, increased by 318 acres, and flax by 20,969. Cattle increased from 3,480,623, in 1851–60, to 3,954,479, an increase of 473,856. Sheep decreased from 3,297,971 to 3,258,583, a decrease of 29,388. Pigs fell off from 1,194,303 to 1,088,041, a decrease of 106,262. Horses decreased from 572,219 to 547,662, a decline of 24,557. The value of stock, in the hands of farmers holding less than five acres, had, in 1841, been £14,771,483 ; by 1846 it was probably £6,000,000, and in 1851 it had fallen to £1,002,156. Between 1871 and 1881, 418,615 acres went back, from pasture and tillage combined, to moor and waste, and yet these were regarded as the fat years of Irish husbandry, owing to the relief afforded by the Land Act of 1871. Had the census afforded careful returns of the land remitted to bog and waste in previous years, there is no doubt that it would have been quite as large, and we think it would prove to be largest in the years when the decline in population was largest, viz., from 1846 to 1857. The depopulation of Ireland has not been arrested, or even checked. And there is no reason to believe that the pressure upon the means of subsistence diminishes as the population lessens, since the means of subsistence are all the product of land and labor conjointly. As the quantity of labor declines, the quantity of labor available for cultivation of the land declines, by means of which the quantity of cultivated land, and of consumers, also declines. The fertility of the land, declining with the supply of labor, points to no relief from the mere policy of depopulation.

108. Evolution of Cultivated Plants as Sources of Food.—A large part of the increase in the fruitfulness of the earth in modern, as compared with ancient epochs, arises from the greater number of plants and animals made available for human food, and for the manufacture of clothing and habitations, in the later periods. Nor does it yet appear that the end of this source of increased production has been reached. China, Egypt, and the table lands of Mexico, Central America, and Peru, are known to have been the three independent centres of cultivation from whence many, or most, cultivated plants and flowers have originated.* Of these, the wonderful vegetable resources of China

* "Origin of Cultivated Plants," De Candolle, p. 19.

remain almost unknown to us, though our ambassadors there are served with dinners in thirty courses, consisting of grains and fruits, many of which have never been brought to our Western world.

In China, 2,700 years before Christ, the Emperor Chen Ming instituted a ceremony at which, every year, five species of useful plants are sown—rice, sweet potatoes, wheat, and two kinds of millet. In Egypt, in the Pyramid of Gizeh, which dates from 1,500 to 4,200 years before the Christian Era, figs are cut in stone. In Mexico and Peru maize, tobacco, potato, and the sweet potato, date back probably 2,000 years. In China the records, known as *Pent-sao*, written in our Middle Ages, state that Chang-Kien, during the reign of the Emperor Wu-Ti, in the second century before the Christian Era, returned from a mission to the nations of Western Asia, bringing with him to China the bean, the cucumber, the lucern, the saffron, the sesame, the walnut, the pea, spinach, water-melon, and other Western plants previously unknown to the Chinese. Wheat precedes civilization, or history, from Japan to the Canary Islands, throughout Asia, Africa, and Europe, and is shown to be older than all existing languages, by having a different name in each of the very oldest. The common notion, however, that a species of modern wheat called mummy wheat is derived from seeds of wheat found in the sarcophagi of the mummies is denied by De Candolle. Barley was nearly as widely known as wheat. Cotton originated in India, though a species is also believed to have been native in Mexico. It was brought by Alexander from India, but its cultivation was so neglected by the ancients as to be again brought into Europe by the Arabs, and in the tenth century it passed into China, and its extensive cultivation in China and India preceded its use or cultivation in Western Asia or Europe.

The peanut is believed to have been native of Brazil, and to have been carried thence, in the fifteenth century, into India. Neither the ancients nor the Crusaders knew of coffee or tea, though coffee was native in Abyssinia and Arabia from the earliest periods, and tea was abundant in China from 2,700 B. C. It was hardly known in Europe two centuries ago. Its utility in superseding wine and strong drinks is strongly indicated by the fact that, though the vine and grains flourish in China, wines and

---

* "Origin of Cultivated Plants," p. 362.

liquors are almost unknown and unused. Flax was cultivated by the ancient Egyptians and Hebrews, and hence flax and its product (linen) are frequently mentioned in the Old Testament and on the monuments. The sumac is native throughout the Mediterranean and Caspian region, whence it has been imported into America. Indigo was native, probably, in India, but seems to grow wild in many parts of Asia. It dates back, in Egypt, only to the Middle Ages, and is believed not to have been identical with the plant from which the Mexicans extracted their blue dyes. Throughout North America, to the Isthmus, the Indians smoked tobacco in pipes, and in most parts of South America they chewed and took snuff before the arrival of the Europeans made this plant known to the latter. Hemp, known in China and India 500 years before Christ, was not known to the ancient Egyptians or Hebrews, and yet was known to the early Scythians, who brought it with them from Asia and Russia about 1,500 B. C., and before the Trojan War. It is wild in Siberia, Southern and Central Russia, and the Caucasus. Sugar was unknown to the Hebrews of the Bible period, as well as to the Egyptians, Greeks, and Romans, as a commercial product, though it was first cultivated in Southern Asia, and was brought by the Arabs into Egypt, Sicily, and the South of Spain. The hop extends from Germany to the Caspian, and Eastern Siberia, as a wild and native plant, but the Greeks and Latins were almost entirely ignorant of the use of beer as a beverage, and it appeared in England only in the reign of Henry VIII. The orange originated in China and Cochin, with a probable extension by seed into India, but was only brought into Europe, by the Portuguese, in the fifteenth century. Citrons, lemons, shaddocks, and mandarins, have the same origin. The vine grows wild in all the countries contiguous to the Mediterranean, Black, and Caspian seas, whence it passed into China about 122 B. C. The strawberry was not known as a cultivated plant to the Greeks, Romans, Egyptians, or Hebrews, though as a casual wild berry its habitat probably covered most of Europe and America. Cherries and plums were known to the ancients, and cherry-stones were found in the lake dwellings of Bourget. Apricots have their home in Western Asia, and China, where they were known two or three thousand years before the Christian Era. The almond grows from Persia to the Mediterranean, and was known to the Hebrews, Greeks, and Romans, the latter calling it the Greek nut. The peach was cultivated in China from the remotest antiquity, and appeared in

Europe at about the date of the Christian Era. The pear is mentioned by Homer, and has its habitat throughout Europe, and eastward to Persia. The lake dwellers of Switzerland and Italy gathered wild apples abundantly, and with them some pears. The pre-historic area of the wild apple extends from the Caspian Sea nearly to Europe, and forests of sweet wild apples have been seen in the region between Trebizond and Ghilan. It is not known in Siberia. The quince has the same habitat as the apple. The Greeks regarded the quince as a sacred fruit, which would preserve from evil spirits, and Solon prescribed its use in connection with the marriage rite. The pomegranate has its home in Persia, and was familiar to all the cultured races. While wheat, barley, rice and millet are very ancient grains, rye and oats are very modern, originating among the Thracians, Germans, and Russians. Pumpkins originated in Mexico, Brazil, and South America. Melons originated in Central Africa, and on the Nile and Niger ; water-melons were known to the ancient Egyptians. They were also independently cultivated in Asia. Cucumbers have been cultivated in India for three thousand years, in China from the second century before Christ, and by the ancient Greeks. The olive grows from the Punjaub in India to the Madeira Islands, and was one of the fruits best known to the Hebrews. It has, however, no Sanscrit name, and hence has reached India at a recent date from Western Asia. Peppers, capsicum, tomatoes, and cactus are all American. The fig is native in the Mediterranean basin, from Syria to the Canaries, and was, of course, familiar to the ancients, and only recently known in Eastern Asia. The date-palm exists, from pre-historic times, from Senegal to the Indus.

The banana is native in India and Southern Asia, though Humboldt contended that it was native also in America. Pliny mentions it, but the ancient Egyptians and Hebrews did not know of it. Certain varieties of peas, beans, soy, lentils, carrot, groundnut, or similar leguminous plants, are pre-historical in the Mediterranean basin, where the garden pea was cultivated by the lake dwellers of Switzerland, while other varieties extend over Africa, and still others originate in China and Japan. The garden pea was not, however, known in ancient Egypt or India, though the chick pea was common to ancient Egypt, Greece, and India. Buckwheat is native in the Himalayas, and came into Europe in the Middle Ages through Tartary and Russia, and is first mentioned in Germany in 1436. Chestnuts, of the Italian varieties, form occa-

sional natural forests from the Caspian Sea to Portugal, while the American and Japanese varieties have each its independent habitat. Millet, rice, and sorghum are of Chinese and Indian origin, and were not known to the Hebrews, ancient Egyptians, and Romans, though millet reached the cave-dwellers of Switzerland probably by way of Thrace and the Caspian, while rice became known to the Greeks through Alexander's expedition, and began to be cultivated in Egypt about 100 B. C. Maize, Indian corn, though called "Turkish wheat" in most of the European languages, is purely American, as is also the bird which is graced with a Turkish name throughout America and Europe. Maize was a leading staple of native agriculture, at the period of the discovery, from the Valley of the La Plata to Canada. The poppy is native around the Mediterranean, and was familiar as a medicament to the early Greeks and Egyptians, though the latter did not cultivate it, nor is it mentioned in the Bible. Recently its cultivation has become extensive in India and China. The castor-oil bean is found in the Egyptian tombs, was of course known from an early period, and grows wild in Tropical Africa. The cocoanut-palm, now extensively growing in Africa, was brought there from Western South America, and the islands of the Pacific, and the Indian Archipelago. The beet root was used as a vegetable, from the Canary Islands to the Caspian, three or four centuries before the Christian Era, but is not mentioned by the Hebrews, and was of slight importance, until made a means of obtaining sugar in France, in 1815–35. Clover, red, white, and yellow, grows wild from Spain to the Caspian, and was known to the ancients, but was not cultivated until the fifteenth and sixteenth centuries, when the Protestants expelled from Spain carried it into Germany.

Out of 247 species classified as to their origin by Candolle, the old world has furnished 199, America 45, and 3 are still uncertain. The United States, notwithstanding its fertility, only originates the Jerusalem artichoke and the gourds. Forty-four species only are very ancient or prehistoric, but among these many, like tea, reached Europe latest. De Candolle says, "The original distribution of cultivated species was very unequal. It had no proportion with the needs of man or the extent of territory."

The system of cultivating grasses and roots, as the food of animals who in turn become the food of men, and the consequent evolution in the quantity of flesh and muscular power obtained in cultivated animals, by means of the increased supplies of food

produced for them by human labor, is another chief cause of increase in the earth's capacity to maintain a dense population. Our fat stock shows consist of oxen developed by human labor and art to three or four fold the size which they attain in a wild state, of sheep whose fleece has risen from three pounds to an average of twelve pounds, and occasional instances of thirty-five and even fifty-three pounds. Although the chief of the cultivated species of plants and animals were old at some one locality in the world 3,000 years ago, to all other localities they were new until within one or two centuries. Thus maize, the sweet potato, buckwheat, rye, bananas, were all old in their several habitats, but the world of Socrates, Seneca, and Plato knew nothing of them.

CHAPTER VIII.

LABOR.

109. Definition of Labor.—No word would seem to be more definite or easily defined than labor, and yet few so successfully elude definition. If we say it is "human effort put forth to obtain means of subsistence," we are met by the objection that this definition includes something more than labor, viz., the exchange, which the laborer, makes of the compensation received for his labor, for the means of subsistence. Most kinds of labor are not direct effort put forth to obtain means of subsistence, *i. e.*, the labor *per se* without exchange does not obtain any means of subsistence. One who feeds or drives an engine for a day labors directly only to keep the engine moving by means of the effect of the steam supplied by his fuel on the piston rod. The act has no direct relation to the means of subsistence of the laborer. On the other hand, two men may be fishing side by side. The sportsman in catching his fish intends to have it cooked for his own repast, and therefore, as far as food are means of subsistence, he is putting forth effort directly to obtain means of subsistence. Yet this is not to him labor, but strictly and merely sport or play—as purely as if he were playing chess or base-ball. By his side, however, in a fishing smack, is a man who makes a business of fishing, and who does not intend to consume the fish he catches, but to sell them. To him the same process of fishing is labor. Therefore, effort put forth to obtain means of subsistence is not always labor, and labor is not always effort put forth to obtain means of subsistence.

Yet, to make effort labor, it is not necessary that the worker shall sell his services, or their product. A farmer labors when he toils to fence his farm, which he expects never to sell. It must have the motive of necessity, and is usually combined with the idea of physical exertion. But a burglar who breaks into one's house at night, to carry away gold or plate, does not labor, though he combines great physical exertion with the hope of gain; for crime, however much toil and gain it may involve, is

not labor. But when the burglar is sent to prison, though he works without hope of gaining through his work, that is labor.*

If we say it is effort put forth in production, or in producing

---

* *C. S. Devas*, "Groundwork of Economics," § 53, says: "The term labor or work (*labor, ergasia, travail, arbeit*) is not easy to define. But this is no excuse for those who leave it altogether undefined, nor for Mill, who leaves it obscure. He says (Pol. Econ., Bk. i., ch. i., § 1) that it is 'either bodily or mental, muscular or nervous, and that it is necessary to include in the idea, not solely the exertion itself, but all feelings of a disagreeable kind, all bodily inconvenience, or mental annoyance connected with the employment of one's thought or muscles, or both, in a particular occupation.' This leaves us in the dark as to whether that plowman labors whose plowing is a pleasure to him, and whether playing is laboring, not to speak of this description of labor being applicable to the action of those who weep around a tomb, a stronger use of the term. Adam Smith is vague. McCulloch defines labor 'as any sort of action or operation, whether performed by man, the lower animals, machinery, or natural agents, that tends to bring about any desirable result.' But this is to distort ordinary language, and to turn men into machines, without any gain, that I can see, for the purpose of economics. To say labor, in 'political economy,' is only that exertion that demands something for itself in exchange (Perry), in its obvious sense, excludes the exertions of slaves for their master, and of self-sufficing peasants for themselves and their families. To define it the exercise of any human faculty for a definite object (Hearn) would turn all play into work. To limit it to human activity directed towards the acquisition or preservation of property, is nearer the mark, but too narrow; for all unpaid exertions, literary, artistic, political, religious, would be evidently excluded, and too obscure, for a judge who performed his office for the sake of his pay would or would not be laboring, according as we understand the word "directed" to apply to the end of the operator (*finis operantis*) or to the end of the operation (*finis operis*).

"It is best, I think, to look only to the end of the operation, and to define labor as human action, of which the proper end, or natural purpose, is some good external to itself. Thus, whenever the action in itself gives a reward to the agent, it is not labor. So none of the natural functions of the body, as eating; so no recreation, though it entail the greatest exertion, as hunting; or though to the given individual it may be most unpleasant, as a tiresome banquet. Conversely, whenever the reward is not in the action itself, this is labor, as the tilling of land, whether by the peasant with joy, or the hireling with sorrow; and the action of the night porter, though it be mainly to sit motionless; and of the boatman, though the same physical act of rowing when done by the holiday maker at his side is not labor; for the end of rowing, when done by a holiday maker, is different when done by a hired boatman. . . .

"The best solution of the problem, how to classify labor, seems to me to begin by discarding the terms, productive and unproductive, as misleading and unnecessary, and then not to divide labor according to its results, for these are too vague and disputable, but, rather, according to the proper object, purpose, or end of the particular operation (*finis operis*). According to this principle of division, four kinds of labor can be distinguished, industrial, public, ministerial, and predatory, having as their end, the first, production; the second, some function of government; the third, some personal service (ministration); the fourth, the unlawful acquisition of others' property. Under industrial labor would come that bestowed on agriculture, manufactures, and commerce; under public labor, that of the civil and military service in the widest sense, from the highest to the lowest; under ministerial labor, that of the clergy and teachers, of literary and scientific men, of the legal and medical profession, of musicians, actors, and the like; under predatory labor, that of thieves, smugglers, pirates, false coiners, common usurers, and the like."

commodities, this is no definition, unless we have first defined commodities and production. Even then it would be incorrect, as labor may be employed to destroy as well as to produce. When the Turks captured Constantinople, they proceeded to virtually destroy the Church of St. Sophia, as a temple of Christian art, adorned with statues, images, and paintings, by covering them all with a plain white wall, underneath which, in the Mosque of Omar, they are supposed still to remain. The toil of those who had created these statues and images would hardly be called labor by most persons, because it was art, and it has not been usual to call fine art labor, even where it is constructive of commodities of great value. But the toil of those who covered up these statues was certainly labor, and would have been equally so if they had been employed to break them up into paving-stones. Its effect was destructive, as to the objects of art, though, in the belief of the Turks, it was constructive of a higher form of temple for religious worship.

If a man carries mortar from the street to the roof of a building in a hod, that is certainly labor, if he is free and is working for wages. If he is a slave, being himself capital, it would seem that his work must also be capital, since it is only for his work, as the end, that he is himself owned, as the implement. If he brings a horse, rope and pulley, and lifts the mortar by horse power, charging for the hire of horse, rope and pulley, sitting still himself, is he now charging for his own labor, or for the use of capital? But if his capital can labor, dispensing with his own work, will the charge he gets be interest on capital, wages of labor, profits of enterprise, advantage of monopoly, or premium on idleness? And if capital invested in machinery can be said to perform labor, as when it grinds flour, or draws trains of cars, why does it not equally labor when it takes other equally efficient forms, such as sailing ships, nets for catching fish, implements of all kinds, including money? And if implements labor, then land itself, being the chief of implements, is the chief of laborers, and to speak of land and labor, is to add a part to the whole. If labor is capital when it works from fear of the lash, how is its nature changed when it works from fear of starvation? And if working from fear converts labor into capital, why is not a man who works, from fear that he cannot pay a note, capital?

It was not wholly from oversight that Adam Smith avoided economic definitions. Exceedingly comprehensive terms, like matter, force, time, and space, that can be easily apprehended

without definitions, become mysterious in proportion to their simplicity when we attempt to define them. Metaphysicians prove that matter is only force, and that force is only matter, but when no metaphysician is around, a child can tell force from matter unerringly and without difficulty. Yet the word labor has a meaning, and possibly the difficulty of defining it correctly arises from the sentimental objection we have to remember that labor has sprung from slavery, and in trying to designate the child we have omitted the surname which connects it with its origin, which is servile. Labor is servile effort—*i. e.*, effort that would not be put forth for the intrinsic pleasure of the effort, but solely because such circumstances exist, that one man feels constrained to serve another. This is why the expenditure of effort in art, science, sport, statesmanship, crime, enterprise, eloquence, or religion, is not labor. But work by the convict, or slave, though performed without hope of the reward, through mere constraint, is labor. We are not fashioning these instances to fit an economic purpose, but are simply evolving the true meaning of the word labor from its environment, since it may contain an important economic result.

110. Work Differs from Labor.—When effort is divested of the servile, constrained, or necessitous idea, and is performed to satisfy an innate passion, the term used, both in common speech and throughout literature, changes from "labor" to "work."* Men say of such an one, "he works for the love of it," but it becomes awkward to say he "labors from the desire to labor." The terms, "love's labor lost," and "labor of love," are now used to express something done under the compulsion of a moral or passional coercion, which would otherwise be undone. An author's writings are his "works," so far as they are written from artistic motives; but when, as in the case of Sir Walter Scott, an author is involved in bankruptcy to a large amount, and sits down deliberately to write a "Life of Napoleon," to pay

* Cyrus Elder, in "Man and Labor," p. 26, says: "Man, like other animals, and in a higher degree than the other animals, because more richly endowed with innate impulses to various labors than all of them, is naturally a *worker;* he is not naturally a tramp or a loafer."

Mr. Elder here shifts the term from labor to work, as he was obliged to do by a sense of literary exactness, which forbids that a man or animal working from innate impulse should be said to labor. Even an engine works when it runs smoothly. It labors when it is obstructed, or is unequal to the task. A ship in a heavy sea labors. The lightest adaptation of means to ends, even a political plan, "works like a charm." Think of one who should say of the Homestead Act, "It labors like a charm."

off his creditors, he is said, also, to "labor" on this portion of his works.

The economic reason why labor shall not, and can not in most cases, consist of services which it is a pleasure to perform, is, first, that many of the tasks required to be performed for the support of man are not of a kind intrinsically pleasurable to any body; secondly, those who perform the labor can not by any possibility get the pleasure which their labor is designed to subserve (the miner of coal, for instance, can not make digging coal under ground delightful, because somewhere else a cheerful parlor will be warmed and lighted by the coal); and, thirdly, if all labor were pleasureable in itself, labor-capacity would expend itself wastefully upon the first labor that offers, whereas labor power needs to be carefully economised and saved, for those forms of labor only for which there is a social demand or need, and this social need can only be determined by the willingness of those who are in need to make a return effort, or to pay for the effort expended. Hence the economic use of labor-force requires that no labor shall be performed except as it is paid for, since it is the fact that pay can be got for it that is the index that points out the ulterior fact that it is needed. In this way, as we have seen in our chapter on "Value," demand steers labor, and inertia, or the indisposition to labor, except as we are paid for it, economises labor-force, so as to ensure the expenditure of it where needed, and nowhere else. It is a delight to Gladstone to chop down trees, but if it were a delight to all men to do so there would be no trees left. Chopping down trees must be made irksome to the mass of mankind, in order to limit the expenditure of human force in this way to cases wherein a tree needs to be chopped down, and to ensure, then, an adequate reward in wages to those who perform the task. The ultimate economic necessity that labor should be irksome consists in the necessity of economizing human effort. For we all see that with nearly the whole population of the globe working actively during all their waking hours, and with all enjoyable commodities tending irresistibly toward their proper consumers, and all ultimately consumed, and the consumption of each limited by nature so that he can not if he would consume more than his share, and with the like economic necessity that all the surplus of enjoyable wealth that any one man gets, over what he can consume, shall be invested in some form of reproductive wealth, and that the sole function of this reproductive wealth shall always be to promote the production of consumable wealth, and to forward it to its

consumers, *i. e.*, with every economic law working toward equality in the distribution of consumable commodities, and with all these consumed, and with all human effort economized by being expended only where it is paid for, there is still none too large a supply of commodities and services for the world. Obviously, therefore, if there were less economy of effort, as there certainly would be if all effort was pleasurable, there would be a less aggregate of comfort.

In the psychological nature of man, it is further necessary that economic effort or labor shall be painful in order that the alternative to those efforts which result in dispersing and expenditure shall be pleasurable, and it is necessary that the dispersion of wealth shall be rewarded by pleasures which do not attend its accumulation, or mankind would not, after toiling to accumulate, also toil to disperse it, as we constantly see them doing in enlarging their scale of expenditure, multiplying their wants with every addition to their income, buying parks, country seats, yachts, pictures, traveling in foreign lands, sojourning at watering places, etc. Those, therefore, are in error who assume that all labor should be pleasurable and passionate, as Plato, Fourier, and the socialists generally have done, and as some who repudiate socialism as a creed still fall into from what they deem to be proper moral sentiment.* Only that form of effort to which man has some aversion is labor, and only his aversion to it causes him to economise his effort by confining it to remunerative effort, and only by confining it to remunerative effort can he be sure that he is working in a line for which there is social demand, and only by working in the line of social demand can he be really useful. Hence aversion to labor has both a basis in human nature, and an outcome of social utility.

111. All Labor can Not be Agreeable.—Having defined labor as servile, constrained, or necessitous effort, it next becomes necessary to recognize the fact that the necessity does not proceed

---

* Cyrus Elder, in "Man and Labor," p. 28, says:

"It can not be that man has a natural aversion to labor, nor can it be true of that peculiar kind of man called by the political economists a working-man. Somebody or something is to blame if labor has lost its natural delight. If this be true, we may ask in the language of the great mother,

"'Who has drugged my boy's cup?
Who has mixed my boy's bread?
Who with sadness and madness
Has turned the man-child's head?'"

from the mere coercion of the strong over the weak, but from the inherent economy of nature which intends, and plans, that mankind shall live only by rendering mutual services to each other, including many of the most painful, disgusting, unhealthy, shocking, and disagreeable kind. In compact city life, dead offal and excrement must be removed, and the more putrid, offensive, and even unhealthy it is, the greater the social necessity of removing it. Loathsome, contagious, and malignant diseases such as yellow fever must be treated at the risk of one's life, and, the more fatal or loathsome they are, the greater the social necessity for their treatment. The dead must be buried, the sick, insane, and paupers must be cared for, criminals must be arrested and punished, even if need be to the death penalty, bad passions and base propensities must be met and reformed, or restrained by the coercive force of law. The differences that arise in society from conflicts of interest must be adjusted in the courts, and occasionally wars must be resorted to for the settlement of disputed questions between great masses of people or different races.

To perform all these functions well, there must be an organization of industry, a differentiation of function, and a subdivision of labor whereby each individual shall become the atom or molecule, the grain of fibrine or the particle of gluten, as it were, in the more comprehensive individual, called society. Division of labor implies the continuing, by each individual, in one mode of action, until the purpose of society is accomplished. The same atom of iron can not be, at once, a cog in the driving-wheel and a rivet in the boiler. If transferred from one of these places to the other, the wheel breaks or the boiler bursts. So in the organization of man in industry, the same person can not, at the same time, act as shoe-maker, school-teacher, farmer, and lawyer. To the extent that he attempts to do so, he disorganizes the machine, and industry refuses to make use of him. But while the organization of industry requires him to do one thing, or class of things only, in order to be productive to society, the psychological constitution of his mind requires that he shall find much of his pleasure in transition from one thing to another. These two demands can not often be met at the same time, and hence arises a division of most men's time into business hours and hours of leisure, or working hours and hours of rest, or, economically, the time we sell to others for pay, and the time we reserve to ourselves for pleasure.

The sale of our time to others, whereby they become entitled to claim or compel from us the performance of acts which would

be intrinsically unwelcome and disagreeable, if we were not paid to perform them, is what is generally understood by labor. The payment for labor-time generally, is usually called wages; * the

---

* *Adam Smith* ("Wealth of Nations," Book i, ch. viii, p. 29) assumes an "original state of things" to have subsisted when the laborer got the whole produce of his labor, a state of things which historically never existed. He says: "The produce of labor constitutes the natural recompense or wages of labor. In that original state of things, which precedes both the appropriation of land and the accumulation of stock, the whole produce of labor belongs to the laborer. He has neither landlord nor master to share with him."

So far is this from being true, the history of labor opens either with tribal communism in which the produce of labor belongs to the tribe, or with slavery, in which the laborer himself is owned. He continues:

"But this original state of things, in which the laborer enjoyed the whole produce of his own labor, could not last beyond the first introduction of the appropriation of land and the accumulation of stock.

"As soon as land becomes private property, the landlord demands a share of almost all the produce which the laborer can either raise or collect from it." The fact is that no labor that is appropriative, as hunting and fishing, is done upon land until the land itself has first been appropriated. Then the landlord works his land with such help as he needs, at first owning his workers, until ownership is gradually softened into wages.

Smith assumes that the farmer's profit then comes in as a second deduction from the produce of labor, and the wages of labor are what is left of the produce of labor after paying the landlord's rent and the farmer's profit. In fact, however, the hired labor of a country does not first produce and then submit to a robbery, after the manner supposed by Smith. It is the man who has something, not the man who is destitute, that marks out work to be done, furnishes implements, and sets the idle man at work.

Roscher ("Pol. Econ." by Lawler, Vol. i, p. 137) does not define labor, but in dividing it treats it as synonymous with industry. He says: "The best division of economic labor is the following:

"(*a*) Discoveries and inventions.

"(*b*) Occupation of the spontaneous gifts of nature, as, for instance, of wild plants, wild animals, and of minerals (appropriation). Where this is the only kind of economic labor, man is necessarily dependent on nature in a high degree.

"(*c*) The production of raw materials; that is, a direction given to nature in order to the production of raw materials by stock-raising, agriculture, forest culture, etc., but not by mining.

"(*d*) The transformation (*verarbeitung*) of raw material by means of manufactories, factories, the trades, etc.

"(*e*) The distribution of shares of goods among those who are to use them directly, whether from people to people, or from place to place (wholesale), or among the individuals of the same place (retail). To this class also belong leasing, renting, loaning, etc.

"(*f*) Services in the more limited sense of the term which embrace personal as well as incorporeal goods. As for instance the labors of the doctor, teacher, virtuoso, of the statesman, judge, and of preachers, whose office it is by way of eminence to produce and preserve the immaterial wealth known as the state and the church." Roscher, however, is greatly in error in saying: "The order followed in the above classification is that in which the different classes of labor are wont to be historically developed." He wholly omits the industry in which all other industries begin, viz., fighting, and subduing. The soldier, medicine-man or conjuror, and priest, are the first organizers of industry. The first product sought is security from the enemy. The first source of

wage paid for a specific act is sometimes called a fee. If the time and service paid for is associated with official rank, high social service, skill, responsibility, and dignity, the wage is called

---

life is the lance. The first form of surplus wealth is in amulets and charms to drive away evil spirits. But he is right in placing appropriation before production.

In savage life a man owns whatever he can appropriate. In civilized life a thief, by taking what he can lay his hands on, simply declares his preference for savage life over civilized.

J. R. McCulloch, in his notes to Adam Smith, p. 435, defines labor as "any sort of action or operation, whether performed by man, the lower animals, machinery, or natural agents, that tends to bring about any desirable result. In so far, however, as it is done by natural agents it has no value." The last statement is not altogether true. The first man to invent a wind-mill got, as profits, the whole difference between the cost of grinding the corn by the power previously in use, and the cost of grinding it by wind power. It was only as wind-mills were multiplied that his profits were reduced to the ordinary rates of interest on the capital invested in the mill. The gratuitousness of new natural agents is a gratuitous fallacy. Ths first rates of transportation by steam were graduated on those by sail. So far as steam was cheaper the engine owner made a profit. The first rates of transmission by telegraph were graduated according to what the companies thought the public would pay rather than send by mail. Capital employed in using natural agents for the first time, does not at once, and while it has a monopoly, come down for its profits to current rates of interest on capital.

H. D. MacLeod ("Principles of Econ. Phil.," Vol. i, p. 273) says: "If the money be paid for personal services, it is called wages, or salary, or pay, or fees, according to the different species of service."

Mill (Book i, Ch. i, § 2) says: "Labor is always and solely employed in putting objects in motion; it can only create utilities and not substances, and it is productive when it results in bringing into existence a commodity, and unproductive when it only gives rise to an emotion or pleasure."

Jevons ("Theory of Pol. Econ.," p. 183) says: "Labor is any painful exertion undergone partly or wholly with a view to future good. The amount of labor is a quantity of two dimensions—intensity and time. Quoting Adam Smith's definition, Adam Smith said: "The real price of every thing, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. . . . . Labor was the first price, the original purchase money, that was paid for all things." Mr. Jevons says: "This celebrated passage might not prove to be so entirely true as it would at first sight seem to most readers to be."

Mr. Carey ("Social Science Condensed," by McKean, p. 90) points out that both Smith and McCulloch begin by asserting that labor is the sole source of all value, and then proceed to say that man can fence in a water-fall and by his monopoly get pay for its gratuitous services, thus making monopoly a source of value as well as labor.

Ricardo (Works by McCulloch, p. 50) says: "Labor, like all other things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price. The natural price of labor is that price which is necessary to enable the laborers one with another to subsist and perpetuate their race without either increase or diminution.

"It is when the market price of labor exceeds its natural price that the condition of the laborer is flourishing and happy, that he has it in his power to command a greater proportion of the necessaries and enjoyments of life, and therefore rear a healthy and numerous family. When, however, by the encouragement which high wages give to the increase of population, the number of laborers is increased, wages again fall to their natural price, and indeed from a reaction sometimes fall below it."

salary. If the wage for service rendered is blended with a profit, and is made contingent upon a risk, it is a commission. If the labor is expended in the production of an article like a patent, book, or copyright, of which capital and enterprise incur the risks and take the profits, subject to compensation to the author or inventor for his labor by a percentage on the sales, its pay is called a royalty. If the labor is performed by the means of capital of others loaned to it for the purpose, and is paid for by an equal share in the profits, it is called profit-sharing or working on shares.

112. Labor Less Broad than Production.—Labor must not be confounded with production nor with industry. Production is the work of the employer of labor, since it is his act of employment that produces the labor. What the laborer produces is a diversion of a certain quantum of wages to himself in return for a certain quantum of services to his employer. The contract assumes that the employer is engaged in producing a commodity or a result, be it a railroad or a pin, and that in the course of that work of production he pays a definite sum for the service, *i. e.*, the obedient physical and mental action of the laborer, the employer usually furnishing subsistence, implements, working space, raw materials, job, associates essential to the division of labor, machinery, and marketing the product at his own risk as to whether the commodity is in demand or will pay any return whatever.

Industry comprehends the grand total of employer and employed, space, capital, contract, machinery, competing supply, demand, wages, and every other element bearing on the two parties, employer and employee.

113. The Wage Fund Doctrine.—It is hard to be sure what certain economic writers have meant by what they call the wages fund.* A usual mode of stating it is to say that the rate of wages

---

* *Mr. Cairnes* ("Some Leading Principles, etc.," p. 159) quotes Mr. Mill as stating the wages-fund doctrine ("Principles of Political Economy," Book ii, Ch. xi) thus: "Wages, then, depend mainly upon the demand and supply of labor; or, as it is often expressed, on the proportion between population and capital. By population is here meant the number only of the laboring class, or rather of those who work for hire; and by capital, only circulating capital, and not even the whole of that, but the part which is expended in the direct purchase of labor. To this, however, must be added all funds which, without forming a part of capital, are paid in exchange for labor, such as the wages of soldiers, domestic servants, and all other unproductive laborers. There is, unfortunately, no mode of expressing by one familiar term the aggregate of what may be called the wages-fund of a country; and as the wages of productive labor form nearly the whole of that fund, it is usual to overlook the smaller and less important part and to say that wages depend on population and capital. It will be convenient to

is the quotient arrived at by dividing the whole sum applicable to the purchase of labor among the whole number who find employment. Of course it is. But so is the price of wheat per bushel the quotient arrived at by dividing the whole number of dollars, applicable to the purchase of wheat, among the whole number of bushels actually sold. Yet we do not suppose that this truism in arithmetic is a proposition of any kind in economics, or that it gives rise to a wheat fund.

The price of any quality of dry goods, per yard, is the quotient which would be arrived at by dividing the whole sum of money applicable to the purchase of that quality of dry goods, among the whole number of yards purchased. Does this give rise to a dry goods fund? And so of rent, railway freights, and so on throughout the whole range of prices.

If a boy were asked the distance from where he was standing to the next town, and should answer, "That, sir, is the quotient which may be arrived at by aggregating all the instances of like distance, which exist in the world, and then dividing it by the total number of distances so aggregated," it would require a person extremely deficient in humor to fail to see that he was joking. And yet Mr. Mill seems to be not in the least conscious that he is joking, when he says the average rate of wages is arrived at, by

---

employ this expression, remembering, however, to consider it as elliptical, and not as a literal statement of the entire truth." *

Upon the above, Cairnes says: "As I understand this passage, it embraces the following statement: First, 'wages-fund' is a general term, used, in the absence of any other more familiar, to express the aggregate of all wages at any given time in possession of the laboring population; second, on the proportion of this fund to the number of the laboring population depends at any given time the average rate of wages; third, the amount of the fund is determined by the amount of the general wealth which is applied to the direct purchase of labor, whether with a view to productive or to unproductive employment."

And yet Mr. Cairnes, on p. 161, defines the wages-fund in a very different way. He there says: "It seems to me that Mr. Brassey has mistaken the statement of the problem for its solution. It needs no proof surely to see that if £40,000,000 be added to the existing capital of a country, and the greater portion applied to the direct purchase of labor, the supply of labor and other things continuing the same, wages must rise, or that the withdrawal of a great sum from the payment of wages, as on the occasion of a commercial collapse, must on the other hand, *ceteris paribus*, involve a fall of wages. To us this is not to solve the question, but to state it. What we want to know is what determines the relation of supply and demand—of the wages-fund to the laboring population. Why is that relation such as to yield one rate of wages in the United States, another rate in Great Britain, and a third rate on the continent of Europe? If Mr. Brassey would fairly address himself to this problem, I think he would find that the political economy of the wages question is not quite so simple as he supposes." ("Some Leading Principles," etc., p. 161.)

* "Labor," p. 84.

dividing the total sum expended on labor, among the total number of laborers.

Mr. Mill's doctrine was attacked by Mr. Thornton on the ground that the alleged wage fund, to be of any value in economics, must be a determinate sum, *i. e.*, we must be able to know first in the case of an individual employer, and then in the aggregate cases of all employers, how much money, if any, had been set apart in advance for the payment of wages, for if it was a wholly indeterminable abstraction it was of no use. Mr. Mill gravely yielded to the validity of Mr. Thornton's objection. But neither gentleman seemed to see the broad humor which renders the whole proposition on an exact level with the schoolboy's plan for finding the distance between two points, viz.: guess how much four times the distance would be, and then quarter it.

Political economy can never make rapid progress in England, until missionaries of humor are sent into that country, to inculcate, or in some way develop there, the faculty of apprehending the distinction between stupidity and profundity. Malthus' law of population, as stated both by himself and Ricardo, illustrates the same point. The law is, that as the laborer's income expands, his power and tendency to procreate expands at the same rate, so as to hold the laborer, ordinarily and naturally, down to the same standard as if his wages had not been raised. Now, if an Englishman had any sense of humor, he would see that there is no physiological distinction between the effect of an increase of income on a laborer, a profit-maker, and a landlord, as to his tendencies to procreate his species, as they are all laborers of some sort. Hence, if A. T. Stewart married on an income of say $1,000 a year, or say $500 each for himself and wife, the so-called law of Malthus would have required when his income reached $6,000,000 a year that Mrs. Stewart should have borne him 12,000 children. In fact she did not bear him one. Yet Englishmen like Bonamy Price keep on declaring that the Malthus Law has to do with Political Economy, when it is only a form of unconscious humor, designed to enable persons to be most amusing when they imagine they are most authoritative.

When Mr. Cairnes, however, says that the object, of a wages fund doctrine is to explain why wages are higher in the United States than in Great Britain, and higher in Great Britain than on some parts of the continent, it immediately becomes evident that the word "fund" has no business in the title, and that what we are searching for is the cause of the rate of wages.

114. The Rate of Wages and Margin of Profits.—The natural price of labor, and the actual rate of wages, is that price at which the employer, if he is a profit-maker (*entrepreneur*) believes he will find it more profitable to pay the wage, than to lose the chance of profit by dispensing with the service. The motive, which determines the employment, is the same as determines the price in buying land or goods. If it be said that this definition runs in a circle, and that what it needs to set forth is the cause why the profit-maker pays more in America than in England, the ready and true answer is that the difference between cost of production and price of commodities is greater, and, "profits being the mother of wages," the larger the mother the larger the offspring. And if it be said that we are still defining in a circle, and that what is needed to be known is why the profits are larger, we answer because all profits grow out of an economy of human effort in effecting the maximum of consumable wealth at the minimum of human exhaustion, and that this economy is so facilitated in the United States by the union of the highest intelligence with the most untiring industry, in the application of the greatest diversity of occupations to the evolution of the products of the most abundant areas of fertile land, that more human comfort is created, per head of population, than elsewhere exists. The smaller the effort by which comforts are created and enjoyed, and the higher the standard of comfort attained, the higher must be the rates of profit and wages, since what we call profits and wages are only comforts expressed in the anterior form of the money which will buy them. Hence it is the success of industry, or of the war whereby man overcomes nature, that makes high profits and high wages, the division of the gross returns of each industry between capital and labor maintaining always that essential equality which we have pointed out in our chapter on "Profits and Loss."

It is believed that the average rates of profit on capital, in all countries, periods, and modes of business, bear about the same ratio to the wages of labor in the same countries, periods, and modes of business.

McCulloch says :* "The common and ordinary rate of wages in any country really *depends upon* the magnitude of that portion of its capital which is appropriated to the payment of wages, compared with the number of its laborers." But what does the

* Note to Smith's "Wealth of Nations," p. 30.

magnitude of the sum to be appropriated to the payment of wages depend upon? The appropriation is in all cases made by the profit-maker, and always with an eye single to the profit he can make. Hence the total sum appropriated to pay wages is not the *cause* of the rate of wages; it is the wages itself in their totality. Hence the cause of wages is profits.* But the cause of rent, of interest, and of all production is also profits. Hence profits are the one equalizing standard of value into which all other modes of income known to political economy are exchangeable. Wages, rent, and interest are all modes of profit, the first being a profit on the rendering of service or the performance of labor, the second being a profit on the ownership of land or the capital invested in its purchase, and the third being a profit on the loan of money. All profits tend constantly toward an equality of return on past efforts, but an inequality and exorbitance of return on all new efforts which achieve a larger measure of satisfaction to human desires from a smaller expenditure of effort. Hence profits are the migratory or steering principle in industry, whose guidance, rent, interest, and wages all await and follow. Profits impel to the great inventions, discoveries, innovations, economies, improvements. They are the pillar of cloud by day and of fire by night in the onward march of industry. They keep breaking out in the most unexpected spots, and perpetually surprising the world.

---

* *Adam Smith* so faintly recognizes as almost to conceal the most important fact connected with the wages system, viz., that wages are due to and vary with profits. He says (p. 38): "The liberal reward of labor, therefore, as it is the necessary effect, so it is the natural symptom of increasing national wealth. The scanty maintenance of the laboring poor, on the other hand, is the natural symptom that things are at a stand, and their starving condition that they are going fast backwards."

Gen. Francis A. Walker ("The Wages Question," pp. 129–130) has clearly enunciated the relation of profits to wages. He says: "If a person have wealth, that of itself constitutes no reason at all to him why he should expend any portion of it on labor, on machinery, or on materials. It is only as he sees that he can increase that wealth through production that the impulse to employ it in those directions is felt. But for the profits by which he hopes thus to increase his store it would be alike easier and safer for him to keep his wealth at rest than to put it in motion for the benefit of others." . . . So long as additional profits are to be made by the employment of additional labor, so long a sufficient reason for production exists; when profit is no longer expected, the reason for production ceases. At this point the mere fact that the employer has capital at his command no more constitutes a reason why he should use it in production where he can get no profits than the fact that the laborer has legs and arms constitutes a reason why he should work when he can get no wages."

J. E. Cairnes ("Some Leading Principles") p. 462, says: "Capitalists and laborers receive large remuneration in America because their industry produces largely."

Edward Atkinson, in "What Makes the Rate of Wages," states the same principle thus: "I have attempted to demonstrate that in all productive employment the rate of

It is not clear, however, yet in what definite relation profit-making stands to wages-earning—in the comparative comfort and ease of life it brings to the average of those engaged in the two modes of life. For profit-making includes also loss-incurring, and the means of estimating the totality of losses, incurred by the profit-makers, are very defective. The New York Chamber of Insurance once put forth the estimate that the losses arising through the destruction of property by kerosene, used for lighting purposes, exceed the entire value of all the petroleum extracted from the wells to that date. There is a prevalent belief, among those most experienced in gold and silver mines, that the amount obtained from the profitable mines so little exceeds the losses on the unprofitable ones, that the net result makes raising ore less profitable than raising corn. The number who fail in mercantile life is frequently stated at from 90 to 95 per cent. But those who succeed constantly make a percentage of loss which tends to reduce their profits to the average level of the salaries usually paid to men of their capacity.

115. Is Population a Check on Wages?—Adam Smith taught the germ of the doctrine, which Malthus elaborated, that there is a sort of food fund in nature, apart from human labor, which may properly be spoken of as the "natural means of subsistence;" * that population is abundantly supplied in proportion

---

wages which can be paid in money must depend on the sum of money which is received from the sale of the product. Inasmuch as those who work for wages in strictly productive occupations constitute by far the largest portion of wage-receivers, the rates of wages for personal services, which are only indirectly productive, are gauged by the same standard. All profits and wages must come out of the gross product. Furthermore, all profits, wages, earnings, or other income, must be substantially derived from each year's product, because the year corresponds to the series of seasons in which one crop is made. A part of the product of each year is carried over to start the work of the next year upon; but a part of the product of the present year was brought over from the previous year to start the work of this upon. Therefore the measure of what there is to be divided by the measure of money must, in the long run, depend upon what each year's product will bring in money. If, then, the annual product is large, because the resources are great, because capital is ample, because labor is effective, because the army is but a border police—then the sum of money derived from the sale will also be large, for the reason that in spite of all natural obstructions between one nation and another, the product of one nation, as a whole, comes directly or indirectly into competition with the product of the world."

* "Wealth of Nations," by McCulloch, p. 36: "Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it. But in civilized society it is only among the inferior ranks of the people that the scantiness of subsistence can set limits to the further multiplication of the human species, and it can do so in no other way than by destroying a great part of the children which their fruitful marriages produce."

as it remains small relatively to this natural means of subsistence; that, as it increases, it presses upon these natural means of subsistence ; that if, from any cause, this means becomes abundant, the multiplication of offspring among mankind is a check reducing the rates of wages, checking procreation, until the means of subsistence again catch up with the number of men.

The fallacies in this doctrine are, (1) that it is only in the savage state that the food fund, which sustains man, is supplied by nature, and even then the average labor of appropriating, what nature is supposed to have gratuitously supplied, makes division of labor, and therefore increase in the number of laborers, a source of greater abundance in the supply. In hunting deer ten persons and twenty dogs will get more than ten or twenty times the quantity of deer that one person can, because they can "corral" the deer, and drive him within their range, or where they want him.

(2) The poor always multiply faster than the rich, and men are always more reckless in multiplying their species in the degree that they are poor. Families continuously rich soon become extinct.

(3) As every species of animal, including man, constitutes a part of the means of subsistence of other animals, the faster they all multiply, the more means of subsistence there must be. Man, by cultivating crops, grains, and grasses for the food animals, increases immeasurably the means of subsistence of horses, asses, mules, horned cattle, including milch cows, sheep, goats, turkeys, geese, chickens, hogs, hares, and all domesticated animals, and of many wild ones. He thus makes the excess of the activity of the procreative power, in the lower grades of life over that of man, a guarantee of the far more rapid increase in human food than man himself can possibly effect in his own numbers.

(4) The check on consumption of means of subsistence, which is found in checking procreation, checks, in an equal degree, the means of production. For all human means of subsistence are not only the product of labor, but the facility of their production increases with the increase in the number of laborers employed in their production, far more rapidly than the number of laborers does.

(5) The check on decline of wages, if any could be effected, by diminishing population, would take effect years after the necessity for it is felt, if it is ever felt, and when perhaps, scarcity may have given place to abundance. Even the one year required for the gestation of the child, is too long a period for a laborer to predict

whether it will increase or diminish his store, and he certainly will not extend his glances over the eighteen years required to convert the prospective offspring into a competing worker. During the first five years after the birth of a child, the cost of his support does not exceed the increased value of the laborer's work through the greater stimulus, steadiness, and sense of responsibility which ordinarily comes with the parental relation. It is only when the child begins to be about eight or ten years of age that the cost of his maintenance is felt as a tax, but by that time, in most conditions of life, he can be worth his board as a helper. Upon a farm he can gather the eggs, feed the chickens, drop the corn, ride the horses to water, and often catch and harness them, pick the berries, and on the great farms of the West he can, perhaps, sit on the sulky of the cultivator, and do part of the mowing or harvesting. In cities he can be cash-boy, messenger, answer the bell, and perform many kinds of light, useful tasks. It is doubtful if there is, or need be, an unproductive period, in the full economic sense, in any human life. To suppose, then, that a passion which nature has made one of the most difficult to resist, since on it depends the continuance of the human race on earth, would be checked in its action by the apprehension that twenty-one years later it would place the labor supply in excess of the demand, is so profoundly dull as to be seriously funny.

116. Countries of High and Low Wages.—The reasons why some countries maintain a higher wage-rate than others are not unlike those by which some individuals, in the same country, maintain a higher wage-rate than others. China, relatively to Europe and America, is made a very slow country by the absence of beasts of burden as a means of agriculture, labor, and rural transportation, and by the consequent absence of agricultural machinery, and of interior roads, and an almost exclusive reliance on human labor, whereby the population are packed in the towns, and along canals and rivers, while large portions of the country, which, with better transportation, would be studded with farms, are left in solitude. Hence the aggregate earnings are lower and enjoyments fewer than in Europe and America. Yet, of what the Chinese do produce, nothing is wasted from human consumption by the demands of horses, cattle, and means of transportation. Their saving in railroad building alone amounts to six thousand millions of dollars for every fifty millions of population compared with the United States. Their labor is all directly bestowed on the production of food and drink and very little on

mere means, machinery, implements, and buildings. Hence a wage very much lower produces a degree of average comfort only a very little lower than is known in Europe and America, or the difference in comfort is far less than the difference in the money used in paying the wages.

There are even many compensating economies, so far as human comfort is concerned, in a stationary civilization. As industry is manifesting no enterprise, it is making no losses by enterprise, but only those very great losses which it makes through lack of enterprise. It is not expending its efforts on great railways not needed, great wars for mere "ideas," great contests for abstractions or theories, nor is it expending its force like the Egyptians on great pyramids and monuments, like the Greeks on great architectural temples, statues, and carvings, like the Romans on great roads, or wars and conquests, like the Germans and French on great standing armies, or like the Americans on great railroads. Needing less force of character, a vegetable diet suffices, nor is this reinforced by alcoholic poisons. Hence, simultaneously with this low wage-rate, there runs an economy of effort, which makes all the efforts actually made tell effectively on promoting the sustentation of life. This is accomplished perhaps more successfully and evenly, taking long periods of time and great numbers of population together, than among any other race, leaving to all classes of the Chinese nearly the same ratio of time for cultivation and amusement as is devoted to those purposes in other countries. *

As the Chinese are slower in production than Europe and America, in like manner do the rural and peasant populations of most of the continental states of Europe, and of many parts of England, fall behind the farming classes in America. A lower rate of agricultural profit has called forth a lower range of enterprise among farmers, less use of machinery, and a slower and finally a dearer and more slavish and laborious mode of production.

Contrary to a very frequent assumption, cities are the sphere of more productive labor than the country, capital earning higher

---

* Adam Smith (p. 33) says: "China has been long one of the richest, that is, one of the most fertile, best cultivated, most industrious, and most populous countries in the world. It seems, however, to have been long stationary,—but it does not go backward. Its towns are nowhere deserted by their inhabitants. The lands which have once been cultivated are nowhere neglected. The same, or very nearly the same, annual labor must continue to be performed, etc."

profits and labor higher wages. Points fifty miles apart differ by from 50 to 100 per cent. if the one is sparsely settled and the other densely. Adam Smith observed that wages a few miles out of London were much less than they were for the same service in London. The same holds in New York as compared with points only thirty miles distant.

117. Labor-Saving Machines.—The introduction of labor-saving machinery has some tendency to enhance wages, in the fact that the employer of the machinery makes at first as a profit the whole difference between the cost of performing the work by the old and by the new process, which rate of profit is only gradually reduced as other capitals compete in the performance of the same work by the new machinery. Until the higher rate of profit is thus reduced by competition, extraordinary rates of profit are being made on the capital invested in performing the work by the labor-saving process, and wherever extraordinary rates of profit are being made, there capital will forego a part of its profits in the form of increased wages, in order to increase its output rapidly and to "make hay while the sun shines." As the successful working on new forms of machinery nearly always involves some degree of skill, it is often better economy to enlarge the wages of those who have some degree of skill than to take on new and unskilled hands. Probably every labor-saving invention has witnessed the increase of wages to labor, through the increased profits to capital obtained by saving labor-cost in the production of commodities, during the interval in which the former selling price of the commodity had not yet fallen to the new cost of production.

One of the most intricate problems in political economy is to measure the gains to wages-workers against the losses to the same class, through any of the causes connected with an expansion of dimensions in production, whether it be the increase in the division of labor incident to the large industries relatively to the small, the introduction of machinery, the extension of markets, the widening of competition and consequent equalization of prices over a large area, the employment of large capitals, the exclusion of effective competition, or any other. If it be sought to determine whether women were better paid or more esteemed before or after the distaff and spinning-wheel were superseded by the power loom, and the needle by the sewing machine, the problem becomes involved by the fact that loss and profit alternate to the same class, from the same cause, as rapidly

and inextricably as the threads in a woven fabric alternately succeed each other as upper and under. The flowing robes of the ancients economized time in sewing, but wasted cloth relatively to the degree of warmth afforded, since they involved little or no cutting, sewing, or fitting to the figure. Sewing in its first effect economizes weaving or makes more clothing out of fewer skins or less cloth or other materials. But by means of the economy of materials effected by sewing, so many more garments come to be worn and kept for wear that there is more use for the weaver than if the economy of the needle had not been practised. The sewing machine seems to dispense with the needle. But no sooner has it done so than styles of ladies' apparel so change as to absorb far more sewing "per front foot" than had previously been in vogue, many gowns being made up expressly to expend upon them all the sewing possible, and being so draped as to render the services of the machine subordinate to the taste of the draper. Thus the demand for the needle has rather increased than diminished through the introduction of sewing machines. So in the absence of statistics it might with reasonable safety be affirmed that in America, where steam is so largely substituted for human labor in transportation, as large a ratio of the population are still employed in transportation as in China, where it is accomplished wholly by human labor. The increase in the division of labor has the effect to educate workmen only in one part of a process, and thereby to render them dependent on the co-operation of a large number of others, so that loss of work to one in many cases means loss of work to all. Per contra, this same increase in the division of labor furnishes some form of work adapted to the powers of the most crippled or incompetent, and so lessens the need of idleness, and therefore of the dependence of the idle on the industrious.

118. Labor Combinations.—The degree in which the state can regulate rates of wages depends on the degree in which it desires to be the responsible *entrepreneur* in all productive industries. A state which says to an employer, "You must pay a given sum for a certain labor-time" should be prepared to run the industry itself at the same rate of wages if the employer fails to do so. Now that the government of England has, by its several land acts concerning Ireland, adopted the principle of "tenant right," *i. e.*, that the tenant has as much a right to occupy land, upon paying a fair rent, as the landlord has to receive the rent, it is impossible to predict that governments may not in the near future, if the

pressure toward socialism continues, acknowledge a *droit du travail*, or right to be employed at a fair rate of wages, by any one who has the requisite means of employment. At present, however, such legislation would seem to be visionary and subversive of liberty. If labor relations can be adjusted in this manner, why should not the sale of all commodities as well? On this basis there would soon be no such fact as individual interest left, and the state would become the sole organizer of industry. It is not the province of economic science to revolutionize society by demonstrating the theoretical inadequacy of all existing conditions, but rather to elucidate the laws which are operative in making existing conditions what they are. Hitherto the province of the state has been to supplement individual enterprise, and to facilitate co-operation in industry, but not to compel it—to aid by relief the sufferer who so fails in industry as to run short of the means of subsistence, but not to acknowledge that if he can find no other purchaser for his labor the state will buy it at a stipulated price.

Laws forbidding laborers to combine to put up the price of labor, and laws forbidding employers to combine to put it down, have a historical value as the expression of the prevailing public conscience at the time, like laws fixing the rates of interest, or the weight and price of a loaf of bread. The purpose of all trade unions is to mass large numbers of laborers into a controllable organization, with the view of withholding it from market until its demand as to compensation, hours, terms, or other details is complied with. It gets a "corner" on labor, to force it up, in the same manner as buying, holding, and refusing to sell large masses of wheat, cotton, or stocks gets a corner on those commodities, and tends to force them up. The statutes heretofore passed against corners in grain, in this country, do not differ in principle from those formerly passed in England to discourage corners in labor, or combinations to withhold labor, in order to raise its price.

The fundamental fallacy underlying such laws is that, while they assume that a laborer is entitled to all his labor is worth, they assume that he can only combine to get more than his labor is worth, whereas there is, in practice, no test whereby to draw the line between combining to get the true value of labor, and combining to obstruct industry by setting upon labor an impossible price. For laborers to combine to get the true value of labor can hardly be called objectionable. And yet employers have the same right to combine to avoid paying more. The limit can only

attach to the acts to be performed under the combination. McCulloch* says "a criminal act cannot be generated by the mere multiplication of acts that are perfectly innocent," meaning thereby that a thousand men have the same right to combine and ask at once for higher wages, and stop work if the request is not granted, as one man has to withhold his labor. Mr. Jevons † combats this doctrine strenuously, holding that for 1,000 workmen to withdraw their work at once, in order to cripple an employer on his contracts (or a car company on its franchise of carrying passengers), is like the act of 1,000 bank-depositors, combining to withdraw their deposits at once, in order to break the bank, or like a combination of 10,000 persons, to walk at one time in a certain street, in order to block it. The English Conspiracy and Protection of Property Act is drawn on this line, and makes it criminal to break a contract of service or of hiring, knowing or having reason to belive that the probable consequence of so doing, either alone or in combination with others, would be to endanger life, limb, or property.

* "On Wages," 2d Ed., p. 90.

† "The State in Relation to Labor," pp. 129-131. "There is no bank in the country which could stand a run on the part of a considerable number of its depositors. It must be quite apparent that any agreement between bank depositors to draw out money, in order to overthrow a bank, is a totally different thing from drawing out in the ordinary course of business, and is in fact a serious matter."

"There is hardly one of the ordinary arrangements of trade which may not be entirely upset by concerted action. The bakers and butchers might starve us out; the cab proprietors might refuse to carry us away; innkeepers might decline to harbor us; our neighbors might tacitly avoid assisting us. No man's life would be safe if unlimited boycotting were regarded as legal."

"*Industrial Treason* . . . I venture to think that a great strike, if carried sufficiently far, might assume the character of social treason. As in the case of the great railway strike in the United States in 1877, it might bring society to a dead lock. If 10,000 Yorkshiremen were to march upon London, with the very best arms they could muster, the government would probably surround and capture them in twenty-four hours by the aid of railways and telegraphs. But if ten thousand railway men were to form a conspiracy to obstruct and destroy the railways and telegraphs of the kingdom, they would create infinitely greater alarm and injury, and would be checked with far greater difficulty."

Mr. Jevons' point involves the fact, which so frequently escapes consideration in connection with labor troubles, that civil legal process acts only on capital. Executions for damages are collectible only against property. Hence the quiver of civil law remedies contains no arrow which will reach labor, *i. e.*, compel the performance of a contract to work by a laborer, or punish its non-performance. We do not urge or argue that there should be such laws enforceable against labor, but there should be a frank recognition of the fact that there are no such laws.

If the law is to recognize a right in the wages-worker to continue at work at a rate which arbitrators may regard as reasonable, a proposition which it would be very premature to affirm, it might follow as a corollary that some mode should be devised whereby the law would at least attempt to hold the wages-worker to perform his contract.

Shall the laborers, who combine, be permitted to overawe and intimidate other employees who seek to take their places?

What species of arguments and inducements shall be deemed to be a fair exercise of persuasive speech, and what shall be styled threats and intimidation? These have been made questions for determination by a jury, the law contenting itself by saying the workmen may combine to stop working, and peaceably to dissuade others from working, but not to coerce, threaten, or intimidate those who propose to fill the places they have vacated. It is probable, however, that as long as "strikes" and "lockouts" occur, something like threats and intimidation will be their usual incident.

There is a disposition among economists generally, to concede that labor unions, to protect wages, have, on the whole, had much the same effect to enhance the rate of wages, as wars between nations have had to promote national rights, and to compel the concession of national demands. Their costs are great. Their sacrifices often seem far more cruel than the wrongs they are incurred to resist. It is, however, as idle to argue against them as to argue against war of any other kind, or even against litigation in the courts. Wherever there are conflicts of interest, sentiment, and belief, there must be war in some form, the most important question being in what manner it shall be conducted. Whether wise or otherwise, they will recur, and their recurrence leaves in its path generally much temporary loss and some small measure of permanent gain.

119. Arbitration and Labor Courts.—To some minds it seems apparent that it is as illogical and impracticable to attempt to vest courts or officers with the power to decide future rates of wages, as between employer and employees, as to decide the prices at which commodities should sell in every particular case. Mr. Jevons denies that such laws can be efficacious,* but admits that in the reign of Elizabeth, of George II., and finally in that of George III., statutes were passed conferring this power, though finally, in the last-named reign, the principle was reasserted that the magistrates and arbitrators should not bind any parties to future contracts, except by consent of both parties.

Others think there is a certain heartlessness in treating labor wholly as a commodity, and that the fact must be recognized that the laborer is made, by various circumstances, immovable as to his

* "The State in Relation to Labor," p. 150.

place of residence, and unchangeable as to his location, and must either be supported by taxation as a pauper, where he is, if he loses his work, or must be kept in work, or must be allowed to starve. That society does not claim the right to allow him to starve is sufficiently shown by the prevalence of the poor laws. The degree of coercion upon the tax-paying employer, involved in requiring him to pay a given rate of wages, does not seem to be necessarily more odious than in requiring him, and men of his class, to support the worker outright by reason of his loss of employment. We believe the arbitration laws, hitherto passed in the United States, do not involve the right, on the part of the courts, of determining future rates of wages, nor do we perceive by what process or machinery such provisions, if enacted, could be enforced. Virtually, therefore, the function of courts of arbitration between employers and employees must, for the present, be conciliation.

120. Labor Agitations for a Social Revolution.—The proposal to reorganize society upon a basis that shall be unselfish, public-spirited, and kind to all, and that shall make men happy in proportion to their unselfishness, instead of, as now, giving them wealth in proportion to their possession of the enterprising and accumulative faculties, was first prominently made by Plato in his republic, and has been reiterated, by visionaries and enthusiasts, in nearly one identical form, for twenty-three centuries. It rests on certain false assumptions in political economy, chiefly that all human possessions, powers, rights, and opportunities ought to be, and can be, equalized, a condition which would be fatal to the very existence of all these possessions, rights, powers, and opportunities. The so-called economic arguments of these agitators generally consist in representing all forms of invested capital as resulting from the robbery of labor, and as being in fact "stolen wages." They make no account of the fact that all invested capital is employed in social uses ; that the greater its quantity the lower the rate of compensation at which society gets its use ; that society gets the use of that portion of capital which is privately owned, at least as cheaply as it gets the use of that which is publicly owned ; and that, were there no great reservoirs of private ownership, into which the successful could profitably invest their earnings and savings, society could not be tided over its periods of lower production, without great famines, and indeed civilization could not exist; women and children could not be maintained after the death of their immediate husbands or fathers; the very implements of the great industries, such as railways,

banks, steamship lines, and factories, could not exist, and society would be remitted back to the condition in which it now is in Central Africa.

The principle of absolute free speech implies the unlimited political right to teach economic and social falsehoods, the aim of which is to stir up the destitute class of society to believe that they can by some undefined uprising, *coup d'etat*, or revolution, come into the possession of plenty of every thing they desire. Underneath these complaints there lies a misconception of the social use that is actually made of all stored-up wealth, and a misinterpretation of the utility of wealth-accumulation, as a means of promoting equality of wealth-consumption.*

The instinct to hoard enjoyable products is manifested by squirrels, ants, bees, and hibernating quadrupeds. In primitive stages of society misers might hoard gold coin. But in the modern organization of industry there is no hoard. The supposed hoard is not a hoard, but merely a power over, or claim upon, some form of reproductive wealth, like ships, cars, or locomotives, of which labor has the loan and custody as implements, the public has the product, viz., transportation, society has the net result, viz., cheapness and equality of consumption, and the so-called hoarder has a power to draw dividends on stock, the whole of which—except the small fraction required for his clothing, shelter, food, and fuel—he must sooner or later, and directly or indirectly, and at home or abroad, pay out for labor. It is singular that the socialists, who begin by affirming that labor is the sole cause of all value, fail to infer that the only use to which wealth can be ultimately put must be to pay for labor, and hence that, in the long run, labor must get it all.

Thus Mr. Grünlund first arrives at the rate of working on

---

* Robert Ingersoll, in a lay sermon, at Chickering Hall, delivered to an audience chiefly socialist, said: "It is an insanity to get more than you want. Imagine a man in this city, an intelligent man, say with two or three millions of coats, eight or ten millions of hats, vast warehouses full of shoes, billions of neckties, and imagine that man getting up at four o'clock in the morning, in the rain and snow and sleet, working like a dog all day to get another necktie! Is not that exactly what the man of twenty or thirty millions, or of five millions, does to day? Wearing his life out that somebody may say, 'How rich he is!' What can he do with the surplus? Nothing."

The investments of Vanderbilt in railways, of which society has the entire use in transportation, of which labor has the entire loan and keeping, for productive purposes, and of which Vanderbilt has the control and government, only on the single condition of paying more for its stock, and running it more economically than any competitor, bear only a humorous, not an economic, resemblance to an investment in billions of

shares, which, as we have shown in a previous chapter, is carried on between capital and labor, by adding the value of the raw materials, and allowing 5 per cent. of the total value for annual depreciation of machinery, implements, and buildings—deducting the total of these two from the value of the finished products of manufactures. The remainder gives the total joint earnings, or fund for division, between the labor performed in the factory during the year and the labor stored in the form of capital in the factory, good-will, stock, land, machinery, losses, bad debts, extensions of plant, profits, and all other modes in which capital has been invested, or sunk, in creating the business in which labor is employed. Mr. Grünlund assumes that labor, instead of being permitted to work the factories on equal shares with capital, ought to take the whole, and that all that capital gets is "fleecings." *

This is equivalent to holding that there ought to be no means of investing the savings of labor in any reproductive form whatever, but that civilized society ought to return to the African state, in which no reproductive capital exists.

But, because labor agitators can formulate no remedies which it would be within the province of a legislature to enact, it does not follow that they may not bring about a state of feeling in the

---

neckties. The basis of the socialist complaint is that the wealth, accumulated in large fortunes, is wealth capable of being privately used. It is not. It is social wealth publicly used and privately controlled.

* "The Co-operative Commonwealth," by Laurence Grünlund.

Mr. Grünlund continues, through 278 pages, to anathematize society, but the following is absolutely the only line of exposition he gives of the mode in which things are to be mended. On p. 102 he defines his whole remedy as follows:

"For what is 'the Co-operative Commonwealth?'

"Extend in your mind division of labor and all the other factors that increase the productivity of labor; apply them to *all* human pursuits as far as can be; imagine manufactures, transportation and commerce conducted on the grandest possible scale, and in the most effective manner; then add to division of labor its *complement*,—CONCERT; introduce *adjustment* everywhere where now there is anarchy; add that *central regulative system* which Spencer says distinguishes all highly organized structures, and which supplies 'each organ with blood in proportion to the work it does' and—behold the CO-OPERATIVE COMMONWEALTH!

"The Co-operative Commonwealth, then, is that future social order—the natural heir of the present one—in which all important instruments of production have been taken under collective control; in which the citizens are consciously public functionaries, and in which their labors are rewarded according to results.

"A definition is an argument."

Imagine a legislature, or constitutional convention, assembled and asked to enact the above vision into law. The act would read: "Be it enacted that division of labor and all the other factors that increase the productivity of labor shall be applied to all human pursuits as far as can be; that manufactures, transportation, and commerce be conducted on the grandest possible scale," etc. The act would be useful only as a joke.

minds of many men which may call for legislative as well as judicial action. There is a point at which the teaching of a false system of political economy merges into incitement to assassination, thugism, and treason, just as there is a point at which the doctrine of Malthus, concerning population, merges into becoming accessory before the fact to a criminal abortion, and just as there was a point in the doctrine of the duty of suppressing religious heresy by coercion, where even the supposed preaching of the Christian gospel merged into an attempt on the life of innocent persons.

The inference, in logic, is short, and reasonably correct, that if all returns upon capital were a robbery of labor, then it would be the duty of the laborer to avenge his poverty on the capitalist. The premises being false, can society long continue to hold that every man has, under the sacred guise of free speech, the right to recommend and urge crimes, which nobody can be permitted to commit?

121. Causes which Compel Men to Work for Wages.—Law and government have almost nothing to do with determining whether a man shall continue destitute—working for wages all his life, or shall accumulate a fortune and employ thousands of laborers. Birth and education influence it almost as little. Neither race, sex, color, nor even health, are more than secondary aids. Honesty is not indispensable to money-making, and though knavery, that keeps within the law, is often consistent with great business success, yet those who are highly successful as money-makers compare, on the whole, very favorably with the unsuccessful, even in integrity.

The qualities which take a man out of the wages class, or, on the other hand, condemn him to wages labor for life, are clearly definable, and work with a precision nearly invariable. Haste in forming judgments, egotism in contesting the aims or thwarting the plans of one's superiors or associates, inability to defer to the will or judgments of those on whom one is dependent for success, making up the qualities known as "big head," will keep very bright men in the wages class. Animalism, or the inability to resist the temptation to sensual indulgence of the appetite as soon as the means are obtained, prevent that exercise of parsimony at the outset which is usually necessary to emancipate one from wages work. Timidity in investing one's money in doubtful enterprises, for fear of losing it, may often concur with love of the ease of life which belongs to a person earning comfortable wages,

to retard enterprise, and as a rule, unless a person becomes a handler of capital, and an employer of labor on his own responsibility, before he reaches thirty years of age, he will work for wages all his life. Multiplicity of aims, when one is trying to do business, as, if one desires also to be a patron of art, music, politics, religion, literature, philanthropy, or social reform, cause "too many irons in the fire," a fatal objection which remands many, who have once acquired capital, back to the wages life, or, at least, to salaried positions. A defective sense of value, or an inaptitude for discerning in what directions values will rise, will keep a man in the wages life. A captious, quarrelsome, or litigious temper, peremptory in asserting its own way, and quick to terminate business relations without compromise, strewing a man's life with unadjusted enmities and severed friendships, will often limit greatly one's ability to become an employer of labor. Yet, it must be admitted that, not seldom, there are men who, by one or more acts of sharp-grasping, and even criminal injustice, have attained the beginnings of large fortunes, thus beginning, in villainy, lives which have been distinguished by great economic success.

The qualities which keep a man in the wages class, when analyzed, are generally, though not always, those which would make it least to the interest of society that he should organize and control labor. Usually it is being unfaithful over a few things, that prevents his being made ruler over many things. Animalism, egotism, precipitancy, insubordination, sensualism, timidity and indecision, love of ease, fear of risk, versatility of aims in life, lateness in learning how to make money, defective sense of values, inaptitude to adapt production to demand, uncompromising quarrelsomeness and imperiousness, are all reasons which will cause one's use of money to be unproductive, and one's influence over industry to be disjointing and disastrous. But the fact that one gets his money by a trick or fraud, as Jacob in cheating Esau, does not indicate that the use he will make of the money will be of a kind to lessen, derange, or demoralize industry.

The kind of men society is interested in having placed in control of industry are those only who will, when an enterprise is small, devote the minimum of its returns to personal indulgence, and the maximum to productive effort. This kind of man may be opprobriously styled a mean, sharp, or overreaching man, but he has the qualities which will impart to industry, in its earlier strug-

gles, success and permanency. On these qualities labor depends for its employment, and consumers for cheapness.

When, by these means, as much effective industry is brought under the control of one will, as one intelligence can wisely guide, then the possessor of this will and intelligence has risen to his greatest possible utility and dignity, usefulness, and profit, as an accumulator of capital and organizer of labor.

Meanwhile the lack of the qualities which will cause a man successfully to accumulate capital, always implies the lack of those whereby he could employ labor with profit to itself, since all wages work is, as Mr. Grünlund's own diagrams show, a system of product-sharing, and hence the "boss" who cannot make profits for himself cannot, continuously, make wages for his men. But if a man lacks the qualities essential to make the possession of capital profitable to him, it is no social wrong, but a very great blessing to him, that a class of men exist possessing these qualities, and able to give useful direction to his industry, which he could not usefully direct himself.

Whoever has seen any thing of the two classes of men knows that precipitancy, misinformation, generosity, insubordination, lack of calculation, and yet lack of courage, characterize the deliberations of nearly all workingmen's assemblies, while those of capitalists, however grasping, compromising, or corrupt they may be, are superior in a spirit of calculation and forethought.

The wages relation does exalt the profit-maker to the position of master, and sink the wages-earner into that of servant, but it arises out of psychological causes as clearly a part of the necessary constitution of man as the causes which distinguish force and matter are in physics. Out of this relation grows an organization of industry which is anarchic, in the sense that its essential principles are not due to, or affected by, human law ; but which is of far more value to mankind than any and all government or law can possibly be.

122. The Organization of Labor in Industry.—Any organization of labor which fails to include within itself the capital necessary to the employment of labor, evidently implies the existence of another organization of labor, exterior to, and more or less independent of it, viz.: the organization of labor by capital, which employs the labor, gives it all the means of subsistance it actually receives, and even the means with which it sustains all collateral and secondary attempts at organization, including the means with which labor organizes itself, to fight

capital, when war between the two is necessary. Hence it is the primary organization of social industry, through the co-operation of labor with capital, under the inducement of wages to the worker and profits to the employer, that now constitutes the existing organization of labor as an agent in actual industry. All other organizations of labor, such as the Knights of Labor, the Central Labor Union, and the trades unions, are organizations effective to aid in settling, with capitalists, the terms upon which laborers shall enter into the final compact with capital. Thereby they finally become, in the only true sense of the word, organized labor, *i. e.*, labor organically set in motion to effect industrial results, viz., to increase the consumption, production, and distribution of commodities. What are ordinarily called organizations of labor, *i. e.*, societies to adjust the terms on which men will work, bear the same relation to the actual organization of labor, or to society at work, as primaries in politics bear to the real government. When the actual officers of government have been selected, the primaries dissolve and lie dormant until another occasion for selection arises, while the government moves on in the hands of the officers, whose choice the primaries have aided to determine.

When the Knights of Labor, trades unions, Brotherhood of Locomotive Engineers, and other similar orders have done their work, labor is not yet organized. It has only fixed the terms on which it will organize. Its real organization is only arrived at when the wheels of industry are again set in motion, with every man at his post, the loom deftly weaving its product, the Bessemer cauldron blazing with its silvery draft of liquid flame, the engine toiling smoothly under its tremendous burden, and the car gliding "o'er the stony street." Labor is really organized only when society is again at work.*

An example of a true organization of labor may be found in the

* In a paper read before the Cleveland convention in May, 1886, by Lawrence Harmon of Peoria, it was stated that the fact of 200,000 men striking between April 24th and May 12th, and 125,000 men being out in the week ending May 12th, had entailed a loss of wages amounting to $3,000,000, and of gross returns to capital rising to $2,500,000, of $4,000,000 in losses upon deferred and cancelled contracts, and of $20,400,000 upon building contracts; the entire loss upon strikes in the three months immediately following the first of May aggregating many hundred millions of dollars. To this must be added the effort of the anarchists in Chicago to convert the strikes into a social revolution, the slaughter of the police by dynamite, and the impending sentence upon leading anarchists consequent upon the tragedy. No one mistakes these events for an organization of labor. They are the disorganization of labor in its most short-sighted, cruel, and criminal form. See note to p. 326.

following illustration: Every one recognizes that working a farm on equal shares, where one person finds the land, improvements, buildings, seeds, fruit trees, implements, and, perhaps, cattle and flocks and poultry, while the other brings only the labor-power of himself, his family, and those whom he may hire, is a fair bargain, or, to put it more emphatically, a just partnership. For the farm, as it stands, represents many years of labor already done. The working tenant, who proposes to work the farm, offers one year of labor to be done, against many years of labor already done. This is the metayer system of Europe. Indeed, most parts of the world in all ages have been tilled under it, and its equity still remains to be questioned.

Now fifty-four railways, which cost to construct and equip them $1,251,795,029.74, make annual returns to the Railway Commissioners of Illinois. Their par capital is more than twice that sum, but with that we have not at present to do. These railways employ 156,007 workers, of all sorts, from president to brakeman. Their gross earnings are about one hundred and sixty-three and one-half millions of dollars, and yet all these railways are worked upon shares by the naked labor, *i. e.*, labor not backed by the least capital employed in the business. The sharing comes out so evenly, though no effort at even sharing or profit sharing is thought of in adjusting any workman's salary, that there are paid in salaries and wages $81,936,170.81, and there are paid to the capital (labor previously done in constructing and equipping the roads) $81,720,265.53 yearly.

123. The Terms of Partnership. Labor and Capital.—Working on shares is not an accident, in that natural organization of labor which arises through each man fitting into the niche that he finds made for himself, and doing simply the best he knows how to do, minding always his own business, and leaving other people to mind theirs. For instance, the total manufactures of the United States have first to pay for their raw materials purchased, all of which have been the finished product of one or more previous industries, and have been created by a joint partnership of labor with capital, resulting in a joint sharing of wages of labor with returns to capital. Having paid for these, there remains out of the whole price received on sale of the products, a gross fund, out of which the capital (or labor done before the year began) had to divide with the labor done during the year. The division in 1880, for the total manufactures of the United States, was:

To wages (exclusive of those earned on raw materials)	$ 947,953,795
To capital for all purposes	1,024,801,837

The share taken by capital includes payment for erecting plant, procuring orders, marketing product, extending works, making repairs, insurance, machinery, interest, losses by bad debts, and losing contracts, etc. The principle here carried out is evidently that of working on shares. In the salt manufacture the division was:

To wages (not earned on raw materials)	$1,260,023
To capital (for all purposes)	1,495,594

In the mixed textile fabrics, the division was:

To wages (not earned on raw materials)	$13,216,753
To capital (for all purposes)	15,677,109

In the iron and steel manufacture, the division was:

To wages (of same process for which returns of capital are counted)	$55,476,785
To capital (for all purposes)	49,809,750

Where the nature of the business, or the inventions made in it, are such that capital invested in machinery performs almost the whole of the labor involved in it, or where the nature of the business is essentially a commercial rather than a manufacturing one, the slight work performed in the manufacture being a mere incident in a process essentially of buying and selling, as in meat packing, lumber, leather, etc., the transaction is less a partnership and the share of labor diminishes. Where, on the other hand, men and skill are nearly every thing, and machinery next to nothing, as in the ship-building, at a time when it consists, as now, in the United States, almost wholly of repairing, and the silk manufacture at a time when new processes have to be introduced through new workmen, and a generation has to be educated up to the art, the share of capital sinks, and the share of wages expands to three-fold the partnership share. Compare:

Slaughtering and meat packing...	Wages to labor	$10,508,530
	Gross returns to capital	25,314,981
Woolen goods manufacture...	Wages to labor	25,836,392
	Gross returns to capital	33,924,718
Lumber.	Wages to labor	31,845,974
	Gross returns to capital	55,226,360
Leather.	Wages to labor	4,840,413
	Gross returns to capital	7,199,375

And again compare the arts in which machinery is of little importance, ship repairing, or in which skill is being developed by an educating process (silk manufacture) :

Ship-building, repairing. .	Wages to labor . . .	$12,713,813
	Gross returns to capital . .	3,350,156
Silk and silk goods manufacture. . .	Wages to labor . . .	9,146,705
	Returns to capital . . .	3,805,217

It is idle to deny that these figures prove that under the existing wages system all industry is product-sharing, in fact. Though the proportion in which the two factors share with each other varies, according to the relative importance of the service which capital renders to labor, when weighed against that which labor renders to capital, equivalent values exchange between the two. Where labor can say to capital, we can perform this work three times better without you than you can without us, as in ship repairing, it takes a three-fold share, and *vice versa.*

It would be interesting to compare the unintentional profit-sharing, thus pointed out in the aggregate industries of the United States, with the intentional profit-sharing practiced by M. Godin in France, by the Pillsbury Flour Mills at Minneapolis, by the Peacedale Woolen Manufactory, and by Brewster & Co., with a view of determining whether the share of the value of the aggregate product which goes to wages is larger in proportion to the share which goes to capital, in the intentional system of profit-sharing, than it is in the unintentional system. It would probably be found that the wage-workers get the highest ratio of the aggregate product, in those industries which depend the most for their profits upon the efforts of the wage-workers. The editor of *Le Devoir* makes the very remarkable calculation concerning M. Godin's enterprise at Guize, "that if all the working population of France were employed in 12,333 similar co-operative workshops, and if similar cash sums had been dispensed in each one, since the Familistre Society has been registered, it would have given an increased purchasing power of no less than £292,880,000 during that short period." But how would an addition of more than one hundred thousand millions of dollars, to the wages bill of the manufacturers of France, affect them in their competitions with those of England, Germany, and the United States ? Does the stimulus of profit-sharing enhance the quality or rapidity of the work, in a degree as great as it increases the cost ? If not, would not the deduction from the profits lessen the degree in which works could be extended, new machinery

supplied, and the number of manufactures that could continue their works, and would not curtailment in these directions react against the wages of labor?

The Pillsbury Flour Mills, at Minneapolis, pays dividends only to those workmen who have continuously remained in service for five years, and to men in certain positions of responsibility, without regard to grades of service. It has paid three dividends of $25,000, $26,000, and $35,000, and the number of dividends is constantly increasing. To estimate the exact value of the profit-sharing policy, to the employers and the employed, it would be necessary to know the gross annual earnings, which constitute the fund for real division between capital and labor. This is arrived at by deducting from the aggregate value of the annual product the cost of the raw materials used, only. The difference will be the total fund for division between labor and capital. Adding together the wages and dividends paid to labor, and comparing the ratio of this total to the total received by capital, with the total received by labor and capital respectively in other establishments, would show whether the owners of the mills do or do not make a profit by profit-sharing, and whether this system will aid or handicap them in their contests with competitors. Few working-men will claim that co-operation or profit-sharing should be resorted to from philanthropic or charitable motives. If resorted to at all, it must be shown to profit the profit-sharer, as well as the profit-receiver. The motive for it must be a business motive. The report of the Massachusetts Labor Bureau holds that profit-sharing must not interfere with the right to discharge workmen for negligence and inefficiency. And the experience of Brewster & Co. shows that profit-sharing does not wholly prevent strikes. Their workmen struck for eight hours a day, when they had it in their own power to reduce their day to eight hours, and when by striking they lost a dividend of $11,000 which would have been due a month later, besides losing $8,000 in wages. At the end of two weeks they went back to work on the old plan, of simple wages without the profit-sharing.

In what degree the wages system may change into one of profit-sharing, may not yet be judged with certainty. The tendency as society increases in complexity, and as industry grows in intensity, is to get away from monthly and annual salaries to piece and job work, and away from partnerships to joint stock concerns, or corporations, and salaries. Whether there may, in certain kinds of business, be a reaction toward profit-sharing and co-opera-

tion, it is too early to determine, but we see no reason to predict it.

124. Effect of Importation of Competing Products on the Wages of Labor.—In proportion as transportation is cheapened, the competition between both capitalists and laborers, in the production of such commodities as admit of ready transportation, extends the war of competition to the populations of all countries having like natural facilities of production. If cost of transportation between England, France, Germany, Russia, or India, and the United States were reduced, in point of both direct money cost and delay, to 0 (zero) or nothing, so that a commodity, at the instant of production anywhere, could be sold in the United States at as low a figure as at its point of foreign production, and if the foreign country made equal use of machine power in production with ourselves, so that our labor could compete with theirs on equal terms, it is obvious that wages of labor expressed in money in all these countries would be equalized, those having the lowest rates being raised, and those having the highest depressed, until one common level would be obtained. In whatever degree our wages are higher than those of the other countries named, we owe the fact either to the inequality of our competition owing to our greater use of machinery, or the obstructions to traffic afforded by distance. For, abolishing these two inequalities, the foreign and domestic labor market would become one market, and it is a fundamental principle in economics, that one commodity can only have one price in one market, where competition is free, and all purchasers are in equal possession of all the facts.

Our profits of enterprise would of course suffer a like deduction; but with that we are not now concerned. Higher profits of capital, and higher wages of labor, are the industrial forces at work to induce the migration of populations from old to new centres of industry. When these stop, national growth by immigration will stop. Wages of labor, in the countries named, bear to each other about the following proportions:

United States,	England,	France,	Germany,	Russia,	India,
150.	110 to 90.	70.	60.	30.	10.

Multiplying these rates of wages into the wages-working populations of the respective countries, and striking an equation throughout the entire mass, would show that if inequalities arising from machinery, and protection arising from cost of transporta-

tion were both removed, we might look for a wage rate of perhaps 20 or 30 in place of 150, since the nation with which we would ultimately equalize would be India with her 230,000,000 of people, among which a fall in our wage-rate of 12 cents could only be expected to make a rise of 2 cents, owing to their greater number.

Setting out, therefore, with the axiom, that differences of value in labor and all other commodities arise from the relative obstructions that exist either in the production or transportation of both labor and commodities, between the countries of higher and those of lower prices, and that in order to maintain two markets or, what is the same thing, two market prices, on one commodity, labor, for instance, there must be intermediate obstructions, preventing a perfectly gratuitous interchange, or free trade, between the two markets, we arrive at the conclusion that to countries paying high wages and high profits, perfect free trade in commodities involves the simultaneous degradation of labor and bankruptcy of capital.

125. Effect of Military Protection to Foreign Trade on Home Wages.—The supposed question between free trade and protection is sometimes obscured by confining the discussion to one mode of protection, and assuming that countries that do not adopt that particular mode of protection, as, *e. g.*, by tariff, are examples of free trade. But a country may send its armies throughout the world, invading the territory of every weak barbarian state, planting fortresses in its harbors, and forcing trading stations into its rivers, and with its bayonet at the throat of 500,000,000 of people, may plant its bankers in their towns, its ships in their harbors, and its flag over every coaling station by which ocean-going steamers may reach it. Its bankers may be supplied with money and credit at 3 per cent. per annum because capital at home is untaxed. Its steamers may be subsidized out of the national revenues instead of being left to the earnings they can make by carrying cargoes cheaply. With all these wires laid and nets sprung, this nation may say to these barbarians "Buy where you can buy cheapest, *i. e.*, of me, or I'll conquer you. I will open your ports to commerce with me, and will close your factories and farms to commerce among yourselves, by grape and canister, whether it bankrupts your native industries and disorganizes your native labor, or not." This may be called for sweetness and purity's sake free trade, but it is the protection of foreign trade by military force. And if, by this forced conquest of all foreign markets, so large a foreign trade is built up that the

interests of its farmers become subordinate in importance to its foreign trade, and it therefore admits foreign corn free of duty, this is not free trade, but the sacrifice of its rural industries to an enforced foreign trade. The Empire of Rome was even more ungracious to the farmers of Italy, since with the proceeds of its foreign conquests it bought the foreign corn and gave it free to the citizens, thus rendering it impossible for the farmers of Italy to raise corn at all. But this was discovered to be no triumph of free commerce, but only an armed destruction of home industry. It only bankrupted the government, to attempt to give away a supply of corn, equal to the cessation of production in Italy, caused by the free corn. Instead of cheap bread it brought waste lands and a bankrupted peasantry.

Modern England repeats the Roman example. But of this in another chapter. Military protection to foreign trade must not be mistaken for free trade. It is a form of protection. It accounts for the higher rate of wages maintained in England than that which prevails in France and Germany.

126. Diversity of Industries Essential to High Wages.—In a country where few industries are carried on, many persons must toil slavishly and spend large portions of time in idleness, vice, or crime, or some form of social revolution or war, because they fail to find the industry that is congenial to them; and, on the other hand, many people must suffer a severe restriction upon all their artistic enjoyments and rarer capacities, because they are not brought into contact with good social, intellectual, artistic, scientific, religious, and philosophic means of culture. Thus production is scanty, and consumption is meagre, and of a mere animal scope and kind. So hard and barren of incident is the life of herdsmen and shepherds in Australia, that they have been known to forget their powers of speech, and degenerate into imbeciles, for lack of an opportunity to exchange ideas with their fellows. Among a very sparse population the ratio of time spent in idleness, physical and mental, so increases, that in a life it must often have the effect of enabling a person to live only one year of sensations in many years of duration. Compared with such a barren and slow life, an active life in town is characterized as "fast," or as "living many years in one."

The capacity to "live fast" arises, therefore, from the diversification of industries. It must not be supposed that, within reasonable limits, living rapidly and vigorously shortens life. On the contrary, no one fact tends so essentially to lengthen life, as the

ability to fill up all its moments with transitions from each form of exertion to some other, before the pleasure involved in the exertion while it is novel shall have degenerated into satiety, disgust, or weariness.

The development of man mentally, morally, and socially is therefore the product of diversification of industry. The progress of society in wealth-production, only faintly measures his corresponding increase in the capacity to obtain from wealth the enjoyment it is capable of bestowing, and to infuse into life the joy with which it can be filled. In the degree, therefore, that a government pursues a course calculated to cause sixteen industries to be carried on instead of eight, or thirty-two where but for its action only sixteen would be prosecuted, it gathers up the idle hours of millions of men and women, and consecrates them to productive industry, while it brings into their mental culture the relief and intellectual profit found in a greater diversity of amusements, instruction, and mental commerce. At the outset, in a new country, no industry is so profitable as the same industry would be where all the processes of commerce are established. Even farming and fishing, in the early settlement of New England and Virginia, involved greater hardship and suffering than would have been performed at all, if the fish and food could have been got by as small an effort as would have sufficed in the old world. Emigrants never go to new countries in search of ease and repose. Every house has to be built, and every farm fenced, and every crop reaped, at far greater than the old-world cost of time and effort.

Gradually, however, the new country begins to develop modes of industry in which it becomes superior to the old. By discovering the proper haunts of fish and game the hunting and fishing, at first precarious, becomes abundant. Then it is ascertained that potatoes, tar and rosin, hewing timber for shipping, and lime, can be got out cheaper than in the old world. As exchanges multiply, profits rise, time and tools become productive, and men feel entitled to wages for their time. Profits, however, are for the time only obtainable in the production of those things which depend on forest trees, such as turpentine, or on wild game, such as pelts, or on cheap land.

At length the country has produced every form of land product, but some of these products require so small a labor to manufacture as, *e.g.*, wheat into flour and flour into bread, and pelts into furs, and hides into leather, that the attempt is made. The

instant it is made an international competition sets in. Owing to the existence of grist mills, tanneries, and furrier establishments in the old world, and the difficulty of inaugurating the smallest new enterprise in competition with one already established, it is only a question of freight, on the wheat to England, and on the flour back, whether ever a grist mill can be started. Make the transportation low enough, and quick enough, and the new colony can not grind its own corn, weave its own wool, distil its own turpentine, dress its own furs, or even educate its own children, or hold its own church service. Certain industries, however, find a natural protection in the three thousand miles of sea which intervene between the new settlers and the countries of old and cheap productions. Education is not importable and children can not be sent across the seas to be taught, nor can parents cross the ocean to pray or attend worship. Hence, the school-teacher and clergyman have natural protection, and first among the manufactures that grow up are those factories in which ignorance of those things which our fathers have known is converted into knowledge, and doubt into faith. So buildings are not importable, and this fact protects the carpenter. Horses must be shod near the farm whereon they draw the plow, and this protects the blacksmith.

At length, however, the country says we have all the ores, coal, lime, and other materials to make iron and steel ; and we can never introduce these industries at all if we wait until they can be started here at a profit, since the time will never come when one producing these things in a small way can produce them as cheaply as one producing them in a large way. But before we can produce in a large way we must produce in a small way. Hence, we must produce these things at a loss first, in order ever to produce them at a profit. They find by examination that this argument applies to far more industries in number, and that their value and profits, if inaugurated, would be far greater than the entire category of industries on which producers have natural protection. Thereupon they impose such a duty on the importation of the competing product, as will cause it to be superseded by the domestic product. Thereupon they multiply the number of industries pursued first two-fold, then twenty-fold. There will probably always be those who will argue that this multiplication of industries does not increase the rate of wages. But there will always be a sufficient preponderance of opinion in favor of the policy to make it part of the inevitable and necessary

action of every self-governing country, unless we may possibly except a country like Turkey, which indulges in a religious scruple against import duties lest they may have the effect to cause a part of the revenues of an orthodox Mohammedan government to be contributed by alien infidels and Christian Giaours.*

127. Exclusion of Immigration as a Measure to Promote Wages.—As wages are the result of a nearly equal division, between capital and labor, of the gross earnings of all industry, and as all earnings of industry, when ultimately analyzed, become exchanges of mutual service, it follows that no increase of earnings can be effected by diminishing the number of those who in this country exchange service, *i.e.*, by excluding new workers, either by preventing births or excluding immigration. Wherever the policy of increasing wages, in the whole population of a country, by diminishing population, crops up, and whatever form it assumes, it is a mischievous error. It results from reasoning from a particular industry to the case of all industries, forgetting that as industries are the complement of each other, what may be the surplus, and hence the poison of

---

* One of the ingenious fallacies, by which this manifest dictate of common prudence is assailed, is to assert that the population of a country may be divided into those who are protected, and those who are not. As well might we assert that the rains of heaven benefit those only who are caught out in the shower without an umbrella. A late free trade organ, *The Million*, which died of inanition, at Des Moines, Iowa, divided the workers of the United States into those engaged in agriculture, 7,670,493; personal and professional service, 4,074,238; trade and transportation, 1,810,256; manufacturing, mechanical, and mining, 3,837,112. It then deducted from the manufacturing group certain classes of industries, which it classes as not protected by the tariff, such as bakers, blacksmiths, box factory operatives, tinners, millers, butchers, carpenters, carriage makers, tailors, and others, numbering in all 2,147,631. Wherefrom, it concluded that the workmen of the United States were divided into:

Protected	1,605,253
Unprotected	15,786,253
Total	17,392,095

A like argument might be framed against the protection of forts by counting the few who dwell near enough to be immediately under their guns and walls with the vast number who do not. The 7,670,493 farmers are chiefly protected in the fact that while they produce only their crops, it is consumers only who can produce prices on those crops, and a crop without a price is not a commodity, but a discommodity. Whatever is the difference between the price of a farmer's product on his farm, and at its place of consumption, is to the farmer a tax for transportation of his products. This he knows can only be removed by a transfer of the manufacturing business in its totality to near his farm. Whatever removes this transportation tax is to him not a tax, but a boon. If protection brings the factory to the farm, and whether it does or not is simply a question of fact, to be verified by observation, then one might as well classify the people into those who are benefited by the sunshine and those who are not, as into those who are and are not "protected workers."

one becomes the source of supply, and hence the salvation, of another.

In excluding immigrants by wholesale without selection, each industry would be excluding its customers in a larger degree than its competitors. Suppose that to benefit the wages of shoemakers we exclude all immigrants. An analysis of those who would come shows that only one in fifty-eight of the immigrants who would come would make shoes. But one in fifty-eight of our entire population make shoes. Therefore the shoemakers would have shut out fifty-seven customers in order to shut out one competitor. But, the fifty-seven customers whom they would have shut out would have added as much to the demand, as the one excluded shoemaker would have contributed toward the supply. All immigration distributes itself among the various occupations in proportion to the demand for it ; it is this demand that determines the distribution. In doing so, it necessarily maintains the adjustment among industries at the most useful economic level, and hence can not do otherwise than bring a ratio of consumers to producers, in any one occupation, exactly corresponding to what it would have been had they not come.

The case of the Chinese formed an exception in this respect, since they nearly all followed one or two occupations, viz., washing, cooking, domestic service, and cigar folding, which had previously been performed by women. To the extent, however, that they became miners, railroad builders, shoemakers, and the like, the principle would apply. The resident Chinese, therefore, were quick to recognize the advantage which would come to those already here from the exclusion of further comers, and rejoiced over the event, their argument being "more Chinee, less wagee ; no more Chinee, more wagee."

In the economic sense every new worker, the moment he arrives, becomes an American worker, consuming, say, ninety-seven per cent. of American products and three per cent. of foreign products ; whereas, as a worker in Europe, whose commodity, or the product of whose labor is brought here, he is a foreign worker in the sense that he consumes only three per cent. of American products and ninety-seven per cent. of foreign products, the imported product acting only and simply as a displacement of American by foreign labor, until worn out.

128. The Barter of Domestic Labor for Domestic Labor Promotes Domestic Wages.—The vastly greater employment given to domestic labor by consuming objects of domes-

tic production, and the consequent effect of this policy to promote American wages, where the country has its choice between native and foreign products, is seen where the raw materials and fuel used in producing the product in question are very bulky and do not admit of transportation to the foreign country, while the finished product is very compact and admits of ready transfer over long distances. In such cases the country which pays somewhat more for the finished product, may make a profit several times greater than this loss, in having raw materials, which perhaps are the incident of another production, or are the spontaneous gifts of nature, raised in value from mere worthless waste substances to a value which makes them a leading staple. Thus where a country packs its meats, before shipping them, it gives value to its salt, sawdust, cooperage, ice, staves, boxes, etc. When it makes its paper it gives value to its streams of water, straw, wood, coal, bread-stuffs, cornstalks, rags, and many other domestic products, which it could never sell to the paper-makers of a foreign country, but can sell in the form of paper to its own people. When it tans its own leather it gives value to oak bark, sumach, and a dozen other worthless things. In making glass it gives value to clays, sands, mill-sites, coal, and chemicals of various kinds. In making iron, it gives value to ores, coal, lime, wood, railways, canals, vegetables, and hundreds of other unexportable products which could not be sold abroad.

A man's freedom, in trading straw for paper, depends more on the price he can get for his straw, than on that he must pay for his paper. If all trade is barter, as contended by the advocates of so-called free trade, when a choice is offered between the foreign article and the domestic, the interest, as it appears to the individual buying the paper, may not be identical with the interest as it actually is to the nation as a whole. For, to the buyer, it is not barter at all, but a purchase for money. But, to the nation at large, it is barter, and will be paid for in commodities, with the difference that, if it be American paper, it can be bartered for by giving any one of a thousand domestic products in exchange, including land, labor, instruction, fuel, vegetables, hay, clay, brick, lime, sand, rocks, fruits, forest trees, etc.; but if bought abroad it can be paid for only in cotton, wheat, beef, or pork. Though the domestic price may range higher than the foreign (an incident to protection which is by no means invariable), yet the trade or commerce in the domestic article is freer, at the higher price, than the trade in the foreign at the lower price, because, in the latter case, the

actual privilege of barter, when it comes to be applied as it must always be in fact, allows the domestic paper to be paid for in either of several hundred or a thousand articles, in which the foreign paper can not be paid for.

It was, moreover, very truly pointed out by Adam Smith that the domestic paper gave employment to two domestic capitals and two domestic sets of laborers, viz., those employed upon the paper itself and those employed upon the product given in exchange for it, while the foreign paper give semployment to only one domestic capital and one force of domestic labor, viz., that employed upon the product given in exchange for the paper.

129. Wages of Social Labor.—The distinction is made by some economists * between the wages paid by the profit-makers, and which are paid from motives of profit only, and those which are paid for domestic professional and official service.

Many of the most useful services to mankind, however, are compelled upon economical principles to be rendered gratuitously. No capitalist could afford to pay a Copernicus to discover the true theory ofthe solar system, partly because he would be himself unable to discover the Copernicus, and partly because the number of men who desire to perform as great a service as Copernicus, and who, with perhaps equal ability, will fail in doing more than propound a chimera, is so great that the ambition to do great things for mankind needs rather to be checked than encouraged; since, with most men, the ambition can lead only to great inutility and bitter failure. Hence I am unable to agree with Mr. Elder's ingenious hypothesis, that social services of great spiritual

---

* *Cyrus Elder*, in "Man and Labor," p. 64, says: "As to that more important, because more largely productive labor which directly originates immaterial utilities only, the natural law of its reward is not so obvious. It can not be paid with the whole, or a part of its product. The doctor who cures a patient can not be paid in health; the professor who educates a pupil can not be paid in knowledge; the jurist can not be paid with a part of the principle of justice which he establishes. Looking at our ascending and widening column of labor, and considering all that is involved in it with reference to the teachings of history, we conclude that men naturally tend to rate this higher labor as to its honors and rewards according to the proportion in which it performs a social use. That labor which serves the whole community in its protection, direction, leadership, ranks highest; and this order descends by degrees, through service to smaller numbers, until it ends in that labor which, performing a material use only, is governed by another and different law of compensation.

"The analysis we have made corresponds broadly to the social degrees, distinct, yet overlapping each other; the first and lowest, in which labor fixes itself in things; the second, in which labor fixes itself in institutions; the third and highest, in which labor fixes itself in man. It is just in the proportion that this last and highest form of labor

utility are necessarily paid for in lofty material rewards. The utmost that could be said is that there is a crude sort of justice in the degree in which the economic value of intellectual service

prevails that productiveness increases, and that man increases in value, while institutions and things decline in value and increase in utility.

"As to institutions—the state and the church—these in a progressive society obey the same law of declining values and increasing utility. In the ruder conditions of life, as n the early periods of history, the community is exhausted in the effort to preserve itself. The head of the state requires and has control of the lives and labors of the people. The value of government is enormous, its utility small. The like holds good as to ecclesiastical institutions, the machinery of which in the ruder stages of society is infinitely costly as compared with the services which it renders. An illustration in the form of diagrams may be helpful, and will at least provoke criticism. Let the following ascending columns represent the stream of history:

POLITICAL INSTITUTIONS.

Free Government.	Utility.		Taxation under General Laws.
Limited Monarchy.	Security of Rights.	Cost of Government.	People have a voice in imposing taxes.
Despotism		Value.	Life and Labor belong to the Ruler.

ECCLESIASTICAL INSTITUTIONS.

Free Church..	Utility.		Voluntary Support.
Clerical Hierarchy.	Religious and Moral Uses.	Cost in Lands and Labor.	Government Support, Tithes, etc.
Supreme Pontifical Power.		Value.	Human Sacrifice. Lands absorbed by the Clergy.

corresponds generally to its material reward. Yet the wife and children of the inventive Goodyear were buried by charitable contribution, and the magnificent invention of telegraphy left Prof. Morse to be provided for by the donations of his friends. While the children of the artist-inventor have derived a modest income from the cultivation of flowers upon the estate presented to him by his neighbors, the vast invention he bequeathed to the world, and no small share of the great fortunes to which it has given rise, have become the property of one who is known to the patent office only as the inventor of a mouse-trap. Social labor of the highest value is paid in a currency of its own, when it is paid at all. But much of it is wholly unpaid. The fame of great usefulness settles often, like a mantle, on the complacent shoulders of entertaining charlatans and eloquent impostors, and the men who most convulse and shake society, by their blunders, are as often laid to rest under the heaviest burden of the flowers of social esteem.

130. Wages of Women.—Women offer themselves in a limited number of occupations, rejecting usually the coarse, vulgar, enterprising, arduous, and dangerous. In clinging to occupations which are deemed becoming to woman as a sex, they come chiefly into competition with those women who, as members of a household, can, if necessary, perform the same work, in a manner which has the effect of gratuitous competition, since the latter will receive the same support and maintenance, if they do not, as if they do work.

It may well be questioned whether society can afford to adopt the theory that woman ought to, or can, with average profit to herself or to men, be a self-supporting competitor in the labor market. It could only be avoided by returning to the Roman idea of the family, whereby a woman could not, by the death of her husband or father merely, be thrown on her own exertions for support. She was still a member of some Roman household or *gens*, and entitled to its protection while rendering it her service and obedience. Perhaps, in our modern life, there are many women to whom even the restraint of a family relation, selected by choice, seems unbearable, and who would not be grateful for a title to dependence on a relative more distant than husband, father, or son. There are, however, many cases of sisters, ruthlessly thrust out upon the world, whom it is within the power of their brothers to support; of nieces in severe straits, whose uncles are in affluence and the like. The growing disintegration of the

family, and the facility of divorce and remarriage, operate in some instances to reveal to woman a capacity of self-support and of independence far more enjoyable than any support she would have as a wife. In other instances, the end is as painful as it could well be.

There are many circumstances which render a woman's work, year by year, less valuable to her employer than that of a man, even where she performs much of the work equally well. Her prospective marriage constantly threatens to terminate her work, while the marriage of a man confirms his steadiness as a worker. She does not enter the bolder and more riskful as well as gainful occupations, wherein her product and not her labor is sold, such as farming, house-building, and manufacturing, and from which, therefore, it would not be practicable to exclude her by mere opinion. Yet among the women who do enter these managing occupations, there are many that evince the highest skill. In 1880, in the United States, 14,744,942 males and 2,647,157 females were working for gain out of a total of about 26,000,000 persons of each sex. About one in ten females and three in five males are toilers for hire or profit. In New York, out of 2,031,369 females over ten years of age, there were 360,381 money-makers, while a male population of 1,960,059 contained 1,524,264 toiling for gain. There were, therefore, 1,670,988 women and 425,795 men not productively employed, or whose toil was not for sale.

Each man at work supports one woman, and every four men at work support one idle man; every fifteenth man supports two women, and four-and-a-half women are supported by men where one even tries to support herself; 2,247 women and 375,213 men do some kind of farming or manage farms. Although land descends equally to daughters and to sons, and though there can be no discrimination on account of sex against woman as a farmer—since it is the product and not the labor that is sold, and no one buying hay or horses can tell whether a man or a woman raised them—yet only one farmer in 180 is a woman, and in most cases she is a farmer only temporarily, while she is a farmer's widow.

In professional and personal service—the life nearest like that of a wife or daughter in the household, as it involves no risk and little heavy toil, and gives wide room for personal favor in selection—the women rise to 205,829 in New York and the men to 332,068. How closely women in their choice of work adhere to the family

order, even when out of the family, is shown by the fact that in the United States 12,294 women to only 1,189 males find work as nurses, 108,198 women to 13,744 men work as launderers, 938,910 women to 136,745 men work as domestic servants, 1,615 women to 781 men work in charitable institutions, 12,313 women to 6,475 men keep boarding-houses, and 13,182 women to 17,255 men teach or live by music. On the other hand, in trade and transportation, in New York, there are 324,304 males to 15,215 females. In manufactures, mechanics, and mining, there are 492,674 males and 137,190 females. Thus, women seeking employment gravitate toward the family type in their selection, and virtually say: "If we cannot have households of our own, we will toil as nearly in the household as we can."

The industrial question is, therefore, How many women outside the family can be employed in a manner essentially like employment in the family? Woman's offer of labor in the market is not free as is that of a man—"I will do all work," but is encumbered by this condition: "My work must be womanly work; *i. e.*, it must resemble as nearly as possible that which woman performs in the family." But woman in the family is a gratuitous worker, *i. e.*, she works for love, affection, and favor, and takes her pay in kindness, generosity, and indulgence, and not in wages. Hence the 360,381 women in New York, who offer to toil for hire, really offer to compete with and underbid the 1,670,988 women, or many of them, who ask no wages, and can at a pinch do the same things without pay, which the toilers are trying to earn pay for doing. In domestic service, the competition is not so much between one cook and another, as a choice, by the matron of the house, whether she will hire a cook or do it herself. Hence nearly every woman works against an unpaid competitor. For though the wives and sisters, daughters and mothers, of the well-to-do in America especially, are the conspicuous and accepted centers of all luxurious and æsthetic living, yet as all this is done for favor, their influence, in controlling and depressing the price of the labor of the women who are compelled to work, is very nearly, especially in periods of adversity, that of a vast fund of gratuitous competing labor. Such a fund, whether it take the form of machinery, foreign pauper labor, or "lady" labor ready to become "help" on demand, can not fail to exert a depressing influence on the wages of the class whom it affects.

The occupations selected by women are also usually those in

which combination by workmen to raise wages is less effective.* But even where women are engaged in work in which unionism may be made effective, they have only very recently begun to take part in the unions.

---

* *Cost of strikes and results.* The *Textile Record*, of Philadelphia, for February, 1888, presents the following: The following shows the number of strikes that occurred in this country in each of the successive years: 1881, 471; 1882, 454; 1883, 478; 1884, 645; 1885, 1412. These involved 22,356 establishments in all. In 1887 about 853 strikes occurred, but full details are not at hand. During the period named, New York State had the largest number of establishments affected by strikes and lock-outs, the whole number being 10,775. Of the strikes about 47 per cent. succeeded; about 13 per cent. were partially successful, and 40 per cent. failed. In the six years the losses incurred are estimated as follows: to strikers, $51,816,165; and to locked-out persons, $8,132,717, a total wage loss of $59,948,882. This makes a loss of about $40 to each striker. Losses to employers in six years, $34,164,914. The disturbances occurred mainly in 13 industries, namely, boots and shoes, bricklaying, building, clothing, cooperage, food preparations, furniture, lumber, metals, mining, stone, tobacco and transportation. Out of the 22,336 establishments engaged, building trades furnished 6,060, or more than one-fourth. The total number of employees involved during the six years was 1,318,624. The number employed in all the establishments before the strikes was 1,662,045; afterwards. 1,636,247, a loss of 25,798. There were 103,038 new employees engaged after the strikes. Of the whole number engaged in striking, 88.56 per cent. were males, and 11.44 per cent. were females. New York, Pennsylvania, Massachusetts, Ohio and Illinois contain 49 per cent. of all the manufacturing establishments in the country, and 58 per cent. of the capital invested in such industries. In them about 76 per cent. of the strikes and 91 per cent. of the lock-outs occurred. Of the strikes, 82 per cent were ordered by labor organizations. The remarkable increase of the number of strikes in 1886 seems clearly to be due to the activity of the Knights of Labor.

CHAPTER IX.

MONEY.

131. What Is Money?—Money is that for which all men will sell or serve; the one commodity for which all others exchange. As language is the one idea which expresses all others, so money is the one value which states, measures, and transfers all others that can be stated, measured, or sold. The functions of money are to hoard, exchange, preserve, estimate, state, and distribute values; to induce, organize, employ, and reward free labor; to stimulate human effort to its highest capacity in the production of wealth, and to the most equal possible diffusion of wealth among men, for enjoyment. Through it, as an economic agent, the instinct of accumulation or gain in man is propelled forward in industry, invention, discovery, investigation, art, science, religion and philosophy, charity and philanthropy, law and government, until by it, as an economic force, man is evolved out of slavery into freedom, out of idleness into industry, out of poverty into wealth, out of barbaric superstition into enlightened scientific knowledge, and out of crime and vice into refinement and mutual kind services, and reciprocal friendly regard and love.* In thus outlining the economic functions of

---

* Mr. Jevons, in his work on "Money," seems to regard the term money as too variable in its meaning to be capable of definition, since it applies, he says, "to bullion, standard coin, token coin, convertible and inconvertible notes, legal tender and not legal tender, cheques of various kinds, mercantile bills, exchequer bills, stock certificates," etc., each of which "requires its own definition." To this Mr. Sidgwick replies that it implies that it is logically correct to define a number of species where it would be logically erroneous to try to define their common genus. ("The Principles of Pol. Econ." p. 230.) Mr. Jevons distinguished four functions which money fulfils in modern societies. It is (1) a medium of exchange; (2) a measure of value; (3) a standard of value [*i. e.*, as Mr. Walker says, a standard for deferred payments]; (4) a store of value.

Mr. Sidgwick adopts, approvingly, the definition given by F. A. Walker in "Money, Trade and Industry," p. 4, viz.: "that which passes freely from hand (owner) to hand (owner) throughout the community, in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it, and without the intention of the person who receives it to consume it, or enjoy it, or apply it to any other use than in turn to tender it to others in

which money is the essential instrument, the economist is not called upon to define the spiritual forces and metaphysical powers, human and divine, which make use of this instrument, still less to substitute one for the other. The analysis of these forces constitutes a field of investigation sufficient to tax and exhaust the utmost powers that can be applied to it. A few economic writers have sought to strengthen their discussion of economic questions by asserting that economic science can only lead to right conclusions, accordingly as it is subordinated to some particular school of thought in metaphysics.*

The conception of this treatise is to remit religious, moral, metaphysical, and theological inference and discussion entirely and absolutely to those works and persons which make these departments of thought their specialty.

---

discharge of debts or payment for commodities." A convenient summary of this definition would be, "Money comprises all current means of payment and purchase."

Hume says: "Money is not, properly speaking, one of the subjects of commerce, but only the instrument which all have agreed upon to facilitate the exchange of one commodity for another. It is none of the wheels of trade: it is the oil which renders the motion of the wheels more smooth and easy."

To this Carey ("Principles," condensed by McKean, p. 352) says: "Had he, however, found it asserted that corn, wine, and the flesh of sheep and oxen, had been 'agreed upon' by men as the food they were to use, he would certainly have asked for some evidence that they really had come to such an agreement, and had not been led to act as they do, by the fact that such commodities had been *provided* by the Creator for men, while creating food of other descriptions for the nourishment of cows, horses, sheep, and other animals. He would naturally have asked the question—'Suppose they did not eat these things, what others could they eat?' and when the answer had been made, that they must either eat of them or perish, he would have regarded it as evidence that their course had been determined by a great law of nature, and had not been 'agreed upon' by themselves."

Roscher ("Pol. Econ.," Bk. ii. ch. iii. § cxvi.) says: "Such a commodity, universally in favor, and which, on that account, is employed as an intermediary in the effecting of exchanges of the most varied nature, in the measuring of all exchange values, and as a value-carrier in time and space, we call money."

The question, whether the term money shall be deemed to be confined in its proper signification to coins of gold and silver, or shall extend likewise to any generally acceptable means of payment, depends on the connection in which the term is to be used. In a question of legal interpretation, as where the Constitution of the United States clothes Congress with the power to "coin money and regulate the value" (weight and fineness) thereof, it would be mischievous to hold that paper money was here intended, as that is incapable of being coined. But if the question be as to the volume of money which regulates prices, as in the article on "Commercial Crises," by Horace White, in "American Cyclopedia of Political Economy," it is equally erroneous to make gold bullion, or even coined gold, the sole money.

* C. S. Devas, in "Groundwork of Economics," following Sismondi, subordinates economics to Catholic ethics, and Chalmers, Wayland, and Mill reflect their metaphysical and theological bias in their economic discussion.

To perform the functions above outlined, money must be an article attractive in its uses and compact in its quality, or it can not first be hoarded as treasure. It is the tendency of barbarous tribes and simple minds to hoard a metal, and to deem it precious, that gives it its first requisite for use as money, viz., general acceptability. Silver in India, to-day, is found performing this first simple function of mere treasure, *i. e.*, of hoarding. The severity of famines is often measured by the degree in which the silver ornaments of the ryot are offered for sale, or for coinage at the mint, to purchase food, for among the Mahometans and Hindoos the holiday costume becomes a sort of savings bank.* This seeming extravagance of dress is really parsimony and economy, and rebukes those simple-minded persons who wonder at the folly of barbarians in investing largely in ornaments instead of clothing. In times of distress white muslin and kid gloves would not procure them as many pence as their silver ornaments would pounds.† The transition of the precious metals from hoarded treasure into medium of exchange, and, perhaps, back into hoarded treasure, took place in a marked way at the capture of the treasure hoards of Asia by Alexander, of Mexico by Cortes, of Peru by Pizarro, and, to some degree, occurs daily.

The metal for use as money needs, next after being treasure, to be malleable, so that it may easily receive the coinage stamp that shall indicate its weight and fineness, and dispense with the services of an expert at every trade. Diamonds, therefore, while attractive, and invaluable as a means of storing wealth, are of no use as money, since they cannot be stamped at all, nor can they be divided without a great loss of value.

The moment an acceptable article is arrived at, into which all other values can be translated at will, all other commodities, and

---

* "Groundwork of Economics," by Devas, p. 413. Monier Williams, "Modern India," 2d edit., p. 30.

† Devas, "Groundwork of Economics," p. 414, says: "The average tender of silver ornaments every month, at the Bombay Mint, before the year 1876, was £600; but in November, 1876, owing to the famine, it reached £7,000, shot up to £100,000 in December, and then kept steadily rising till, in September, 1877, it reached £189,754, and the total for the two years, 1877 and 1878, was £1,946,158 (*Quarterly Review*, April, 1879, p. 389). Le Play gives examples from Russia and Turkey of peasant women wearing multitudes of silver coins in their dress. And gold and silver ornaments have been conspicuous in many of those peasant costumes of Europe, which grew up when the mediæval sumptuary laws fell into decay. So, in Friesland, the golden cap of the peasant women is worth 300 gulden, or about £25. In Portugal they wear jewelry of Moorish designs worth from £5 to £30."

especially labor, offers itself in the market, and commerce among men, or the exchange of mutual services, begins. The instant the article ceases to be generally acceptable, commodities and services are hoarded in lieu of money, and commerce stops. In the case of labor-capacity, to hoard it is to waste or lose it, since, if not employed or exchanged at the instant of production, each hour and moment of labor-capacity is lost forever. Hence any cessation in the efficiency of money involves and includes a corresponding cessation in the rendition of voluntary mutual services by men to each other. If mutual services are rendered at all, they must then be rendered from some emotional or religious reason, or from compulsion or force.

Money is thus the economic spring which moves all voluntary industry, the mediator that effects every exchange, the agent that employs all free labor, and the medium in which all worth is stated and paid for. Without it, little emulation would be possible, and hardly any excellence would be sought, or civilization attained. It bears the same relation to human commerce as the blood sustains to the body, or the circulation of plants to their life. It is the most useful of purely physical agents in industry. It ranks only next below the metaphysical principles of the human soul as a force in economics. So, in nature, water is perhaps the most fruitful of purely terrestrial agents in promoting growth. Yet it ranks below the mysterious potency of the sunlight, in whose immediate generative action all life finds its birth. Money is below man in social utility, as moisture ranks below the sun's ray in vegetative utility. Yet, in our efforts to define the limits of its potency, let us not fall into the error of understating or denying its value. Let us, rather, magnify man by showing his capacity to comprehend money, than belittle him by training him to denounce it. So the poet tacitly praises the sunlight, without mentioning it, when he utters that beautiful tribute to water, since none of the powers he attributes to water could be manifested did not the sunlight bring them into action :

> Pure element of waters, wheresoe'er
> Thou dost forsake thy subterranean haunts,
> Green herbs, bright flowers, and berry-bearing plants
> Rise into life, and in thy train appear ;
> And through the sunny portions of the year,
> Swift insects shine, thy hovering pursuivants.
> But when thy bounty fails, the forest pants,
> And hart, and hind, and hunter with his spear
> Languish and droop together.

All these powers are none the less inherent in water because they imply the superaction of the sun's ray; so all the powers of money are none the less inherent in money itself, because they imply and presuppose the superaction of man as a thinking, willing, acting being. As the action of water, however, can be elucidated without agreeing upon any particular theory of light, so the economic action of money does not necessarily imply harmony in the theories we may entertain concerning man's metaphysical nature.

132. Origin of Money.—It is usual, or frequent, among economists to assert that trade began with barter, and that trade by barter gradually gave way to trade for money. This supposition was rendered plausible by the fact that Europeans, trying to trade with the savages, found gold and silver money not available, and had to resort to barter. As barter, however, instead of being simpler than trading with money, is much more difficult, it seems likely that seizure by force or piracy, and plunder, and not barter, is the real precursor of commerce. Savages would never try to overcome the difficulties of barter, since until money is introduced there are no terms in which values can be thought of, and hence the notion of equivalence of value in commodities which underlies barter can not be entertained. The fact that surprised Stanley, in going down the Congo, was that the natives, beyond the region where money was in use, had no conception of barter, and no use for a stranger except to eat him. In attempting to barter with them, he had to arrange the terms of the trade, and then, by fighting, compel them to make it. He was a pirate, who paid for his captures.

It is clear in Homer that, before money was in use among the Greeks, the value of things was estimated in oxen, as it would now be in pounds or dollars, and sometimes oxen were used in payment.* But at the period of the writing of the narrative of Abraham's purchase of the cave of Macphelah for "shekels of silver, current money of the merchant," silver had come into general use as money.

---

* MacLeod, "Principles of Econ. Phil.," Vol. i. p. 186, cites as follows: "Thus we have, Iliad, vii. 468:

"'From Lemnos' isle a numerous fleet had come
Freighted with wine . . .
. . . . . All the other Greeks
Hastened to purchase; some with brass, and some
With gleaming iron, some with hides,
Cattle, or slaves.'

In Judea, at a very remote antiquity, gold was familiar, as it was also to the red race in Egypt, since they made war upon Nubia and Ethiopia for possession of the mines.*

Singularly enough the date of banks, and paper money, seems to be coeval with that of coin. The Chinese claim to have records of the issue of "flying money" as early as 2697 B. C. A specimen, said to have been issued in 1399 B. C., is in the Asiatic Museum in St. Petersburg, printed in blue ink on paper made from the fiber of the mulberry tree. The Chinese bills bore the name of the bank, number of the note, value, place of issue, date and signature of the proper bank officers. The value was expressed in figures, words, and in some cases in pictorial representations showing coins or ingots equal to the face value of the paper. In the Metropolitan Museum of Art, New York, are Babylonian tablets of banking transactions of the year 601 B. C., or the reign of Nebuchadnezzar. They record loans made in silver shekels, drafts, pledges of security, etc.

Probably the period at which iron was used in Sparta, as money, followed naturally upon that in which oxen were used throughout Greece, as described in Homer. Certainly the Spartans passed to silver and gold as their prosperity increased. Copper was at first the sole money of ancient Rome, and the same word continued to denote both money and copper, long after gold and silver had to a great extent supplanted it.† In England, silver was coined by the government for many centuries before gold, which latter was first coined to a limited extent in the reign of Henry III., but has been the prevailing metal in England for most of two centuries past, and especially since 1816, when England adopted the single standard by making gold its sole money of unlimited legal tender.

133. The Form of Money.—Money, when considered with reference to the basis on which it circulates, may be conveniently divided into (1) coin or value money, (2) paper or

---

"In Il. ii. 448, Minerva's shield, the Ægis, had 100 tassels, each of the value of 100 oxen. In Il. vi. 234, Homer laughed at the folly of Glaucus, who exchanged his golden armor, worth 100 oxen, for the bronze armor of Diomede, worth nine oxen. In Il. xxiii. 703, Achilles offers as a prize to the conqueror in the funeral games in honor of Patroclus a large tripod which the Greeks valued among themselves at twelve oxen, and to the loser a female slave, which they valued at four oxen; and in the same book, 883, Achilles stakes a spear and a cauldron worth an ox."

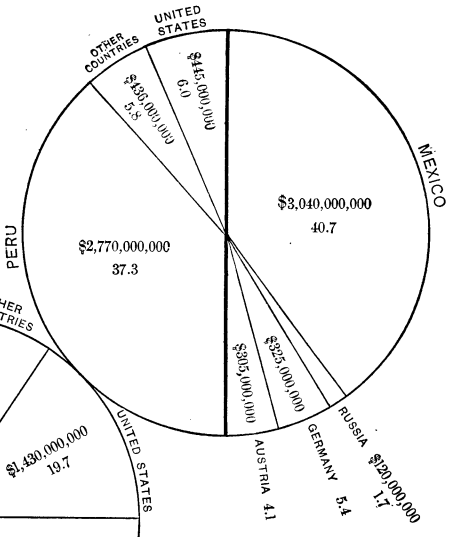
* Brughsch's "Egypt under the Pharaohs," Vol. ii. p. 81.

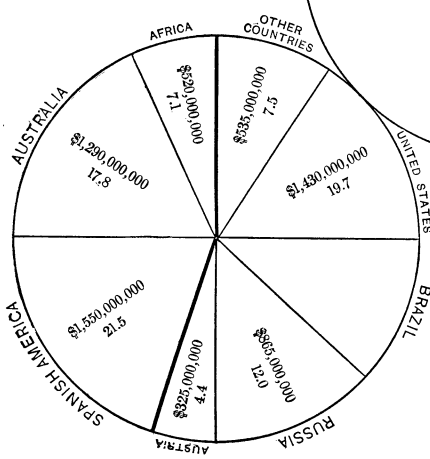
† Shadwell's "System of Pol. Econ.," p. 256.

WEIGHT IN TONS.

	Silver	Gold
Africa		740
Australia		1,840
Austria	7,930	460
Brazil		1,040
Germany	8,470	
Mexico	78,600	
Peru	72,000	
Russia	3,200	1,235
Spanish America		2,220
United States	11,600	2,042
Other Countries	11,200	778
The World	193,000	10,355

VALUES OF SILVER PRODUCED IN 500 YEARS.



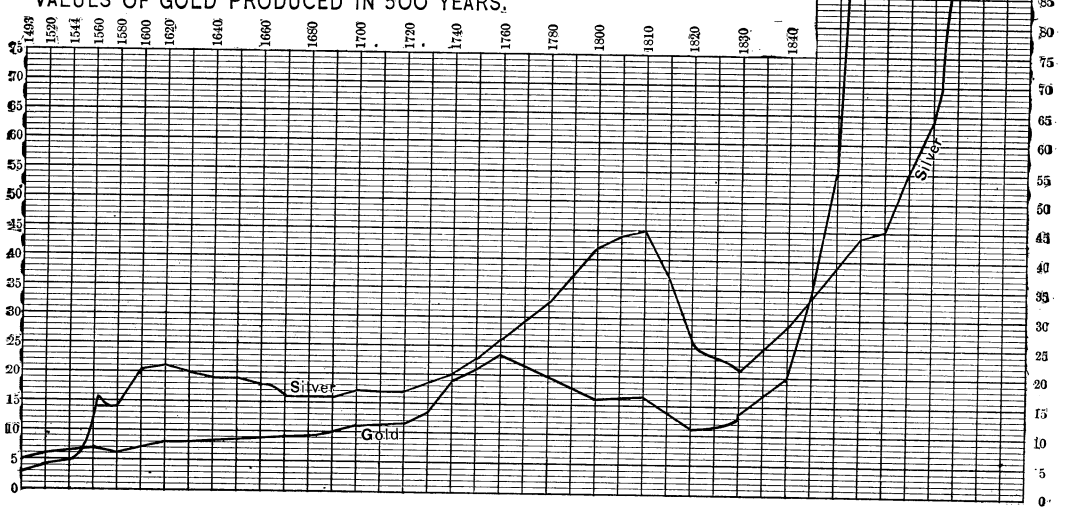


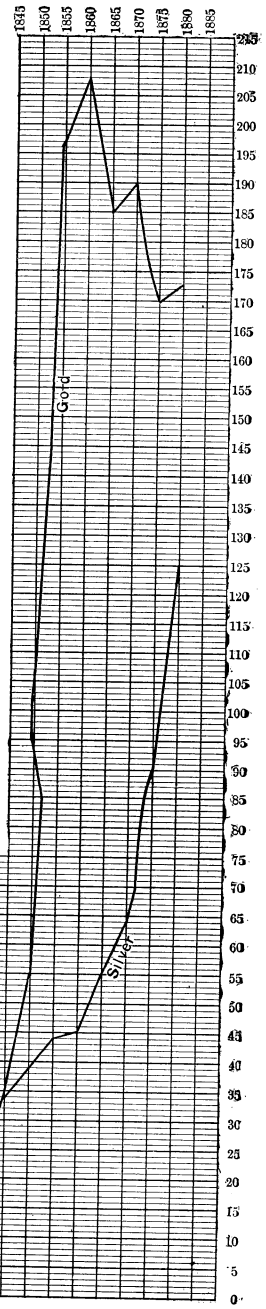
Excess of Silver over Gold 1/36

VALUES PRODUCED IN 500 YEARS.

Gold, $7,240,000,000
Silver, 7,435,000,000
Excess in value of Silver $195,000,000

VALUES OF GOLD PRODUCED IN 500 YEARS.





THE CHART shows the rate of production of Gold and Silver in values from discovery of America to date, on a scale of $1,000,000 to each small section line.

The Diagrams show the relative values of production of Silver and Gold, total quantities produced by each country, and percentage of its production to the total for same period.

The Table shows relative production by weight in all countries.

credit money, and (3) money of account or money which exists only in mental conception or idea. The first is value, the second is a promise concerning value, the third is a mental recognition of value in some commodity exterior to itself. Coined money is again divided into standard coin and subsidiary coin, which is also usually token coin. Paper or credit money is further divided as to its condition into redeemable and irredeemable, and as to its mode of issue into that issued by governments, by banks, and by individuals or firms. Money of account is the unit—pound, dollar, franc, or marc—into which the legal conception of money embodies itself. Some forms of money cross these lines of division and partake of the nature of two or more of these kinds. Gold certificates, and certificates as issued by the United States Treasury, and all Bank of England notes issued on a direct deposit of an equivalent sum in coin, are not so much credit money as paper representatives of coin. A credit is given to their issuer, but only to the fact that he has the coin for which these were issued. This is much less a credit than the general trust that government will redeem a note, which it is known to have issued because it had not the coin on hand to redeem it with. Again, bills of exchange are at times credit money, and in so far as they offset and extinguish each other without the use of actual money, they make "money of account" not merely the idea of money but the substitute for money.

Money, whether of coin or paper, when considered with reference to its status in the law, is either legal tender or not legal tender; and, if legal tender, it may be so to an unlimited, or to a limited, amount. Money of whatever kind, considered with reference to the degree of esteem in which it is held, relative to some other form of money, may be at par, or at a discount. All money, considered with reference to the relation of the country where it is issued to the country in which it appears, is either foreign or domestic.

134. The Substance of Coins.—The material of which the higher class of coins is made, gold or silver, prior to being coined is called bullion. Bullion rises and falls in value, according to the ratio of the supply of the article to the demand for all purposes, including that of coinage, and also according to the abundance of the means of purchasing it, among which the various forms of credit and of credit money may be part. Money coined is not of invariable value relatively to commodities, but its value is far less variable than the bullion of which it is made. For,

when coined, it has two sources of value, viz., the intrinsic value of the bullion included in the coin, and the value arising from the credit of the government. This credit is impressed upon the coin by its stamp, in connection with the statutes defining the uses to which the coin may be legally put. These may maintain, at par with any coin of like denomination, a coin the value of the bullion in which may be much less than the face or par.* Nor is it true that the coin which is made of a relatively depreciated metal, and which is held at par by the credit of the government issuing it, falls, as some suppose, to the value of the bullion it contains, the instant it is taken to another country. For, though the statutes under which it is issued have no direct efficiency abroad, to compel people of other countries to take it at par, yet, if they invest it with a satisfactory degree of credit, it will circulate abroad, if it circulates at all, at the same value as it circulates in its own country, less only the small "shave," or profit which a broker will ask to send it home for exchange.

The standard coin, of any country, is that in which its statutes make all public and private obligations, and dues, receivable and payable, to any amount. The silver dollar and gold dollar are alike standard coins of the United States, since the entire national debt, all customs dues, and all private debts, are legally payable in either. But no silver coins are standard coins of England since 1816, though silver coins only are standard in India. Silver is also legal tender by the banks in redemption of their bills in Scotland and Ireland. But certain silver coins are legal tender in England for private debts not exceeding £5.

In France, Germany, and Italy, silver coins are legal tender

* Count Rosconi, delegate from Italy, at the Paris Monetary Conference of 1878, thus expressed this point. ("Inter. Mon. Conf. 1878," p. 61): "A metal is one thing," he said, "but money is another. Nature makes the metal; law alone makes the money. If the uncoined metal is subjected as merchandise to all the accidents of supply and demand, all the variations of the market, the coined metal being no longer a merchandise, but having legal-tender power, has a price which does not vary. In a piece of metal, coined according to certain rules as to alloy, impression, size, shape, weight, the law becomes in a manner incarnate. It gives it the power of paying obligations, a virtue, a price which the metal-merchandise could not obtain. It is not wrong to say that silver rises and falls in the market; in the territory of the state, where the law reigns and governs, the value of the coin does not change. Our countrymen would be greatly astonished if they were to be told that the five-franc piece which they laid by in 1873, which they put into a savings-bank or kept in their chests, has in the last five years performed all the somersaults outlined in the very instructive table which the Director of the Administration of Coins and Medals of Paris has kindly communicated to the conference. The metal changes in value, it is true; but as long as the state maintains itself the coin does not change; it has, actually and effectively, the value which is indicated by its imprint."

for public and private debts to an unlimited amount, but in Germany the coinage of silver is restricted to a certain sum, and in France and Italy, the coinage of silver is at present suspended.

The standard dollar of the United States is a coin whose emblematic stamp, on both sides, is prescribed by act of Congress. If of gold, it must contain, when stamped, 25.8 grains, $\frac{9}{10}$ fine, *i. e.*, nine-tenths of its weight must be pure gold and one-tenth alloy. It must have a diameter of $\frac{11}{20}$ of an inch and a thickness of $\frac{18}{1000}$ of an inch.

If of silver, it must contain, when coined, $412\frac{1}{2}$ grains of standard silver, $\frac{9}{10}$ fine, being $371\frac{1}{4}$ grains of pure silver, and is $\frac{30}{20}$ of an inch in diameter, and $\frac{80}{1000}$ of an inch thick. The act creating the silver dollar * made it weigh 416 grains (instead of $412\frac{1}{2}$), but it contained $37\frac{1}{4}$ grains of pure silver, as now, that element never having been changed. A reduction was subsequently made by statute in the weight of alloy. No gold dollar piece was at first authorized, but the eagle, or ten-dollar piece, was to contain 270 grains of standard coin and 247.5 grains of pure gold. One gold dollar would, therefore, have weighed 27 grains, and would have contained 247.5 grains of pure gold. Fifteen times 24.75 grains gives $371\frac{1}{4}$ grains, the weight of pure metal in the silver dollar, making the ratio between the pure metals in our coins 1 to 15—the ratio being estimated on the pure metal and not on the standard weights in the coins.† This was the ratio recommended by Hamilton's report on the establishment of a mint,‡ but attained in connection with a different measure of alloy. By introducing about one-ninth instead of one-twelfth alloy as recommended by Hamilton, Congress raised the weight of the standard dollar to 416 grains instead of 405. England, Spain, Portugal, and France then put an alloy of one-twelfth of the total or standard weight into their gold coins.§ Besides the dollar, the other coins of the United States are the double-eagle, eagle, half-eagle, three dollars, and quarter-eagle,

* Passed April 2, 1792.

† "History of Bimetallism in the United States," by J. Laurence Laughlin, p. 21.

‡ Dated May 5, 1791. Hamilton recommended as follows: "That the unit in the coins of the United States ought to correspond with twenty-four grains and three-fourths of a grain of pure gold, and with 371 grains and one-fourth of a grain of pure silver, each answering to a dollar in the money of account." The former is exactly agreeable to the present value of gold, and the latter is within a small fraction of the mean of the two last emissions of dollars, the only ones which are now found in common circulation, and of which the newest is in the greatest abundance. The alloy in each case to be one-twelfth of the total weight which will make the unit twenty-seven grains of standard gold and 405 grains of standard silver.

§ "Bimetallism," by Laughlin, p. 21.

the first five being made of gold only, the last of either gold or silver. The standard coins of other countries are shown by the following table published by the director of the mint:

ESTIMATE OF VALUES OF FOREIGN COINS, JANUARY 1, 1885.

Country.	Monetary unit.	Standard.	Value in U.S. money	Standard coin.
			$	
Argentine Republic	Peso	Gold and silver	0 96.5	1-20, 1-10, 1-5, ½ and 1 peso, ½ argentine and argentine.
Austria	Florin	Silver	39 3	
Belgium	Franc	Gold and silver	19.3	5, 10 and 20 francs.
Bolivia	Boliviano	Silver	79.5	Boliviano.
Brazil	Milreis of 1,000 reis	Gold	54.6	
British Possessions in North America.	Dollar	Gold	1 00.0	
Chili	Peso	Gold and silver	91.2	Condor, doubloon, and escudo.
Cuba	Peso	Gold and silver	93.2	1-16, ⅛, ¼, ½, and 1 doubloon.
Denmark	Crown	Gold	26.8	10 and 20 crowns.
Ecuador	Peso	Silver	79.5	Peso.
Egypt	Piaster	Gold	04.9	5, 10, 25, 50, and 100 piasters.
France	Franc	Gold and silver	19.3	5, 10, and 20 francs.
German Empire	Mark	Gold	23.8	5, 10, and 20 marks.
Great Britain	Pound sterling	Gold	4 86.6½	½ sovereign and sovereign.
Greece	Drachma	Gold and silver	19.3	5, 10, 20, 50, and 100 drachmas.
Hayti	Gourde	Gold and silver	96.5	1, 2, 5, and 10 gourdes.
India	Rupee of 16 annas	Silver	37.8	
Italy	Lira	Gold and silver	19.3	5, 10, 20, 50, and 100 lire.
Japan	Yen	Silver	85.8	1, 2, 5, 10, and 20 yen, gold, and silver yen.
Liberia	Dollar	Gold	1 00.0	
Mexico	Dollar	Silver	86,4	Peso or dollar, 5, 10, 25, and 50 centavo.
Netherlands	Florin	Gold and silver	40.2	
Norway	Crown	Gold	26.8	10 and 20 crowns.
Peru	Sol	Silver	79.5	Sol.
Portugal	Milreis of 1,000 reis	Gold	1 08.0	2, 5, and 10 milreis.
Russia	Rouble of 100 copecks	Silver	63.6	¼, ½, and 1 rouble.
Spain	Peseta of 100 centimes	Gold and silver	19.3	5, 10, 20, 50, and 100 pesetas.
Sweden	Crown	Gold	26.8	10 and 20 crowns.
Switzerland	Franc	Gold and silver	19.3	5, 10, and 20 francs.
Tripoli	Mahbub of 20 piasters	Silver	71.7	
Turkey	Piaster	Gold	04,4	25, 50, 100, 250, and 500 piasters.
U. S. of Colombia.	Peso	Silver	79.5	Peso.
Venezuela	Bolivar	Gold and silver	19,3	5, 10, 20, 50, and 100 bolivar.

Subsidiary, sometimes called fractional coins, are those in which private debts generally of from five dollars to five pounds are payable, and which are not legal tender beyond that sum. Their material is usually silver, copper, brass, nickel, or bronze. Those of the United States are half-dollars, quarter-dollars, twenty-cent

pieces, and dimes, all of silver, half-dimes and three cents of silver or nickel, cents of copper, and nominally mills, though no mills are coined.

The poorer a country is, the slower its rate of production, and the more nearly its currency is expended only on objects essential to vital consumption, viz., food, clothing, and shelter, the cheaper and baser may be, and perhaps must be, the materials which it uses as money. In China, India, Italy, and Egypt, where the wages of labor are low, silver is the standard money of larger commerce, and the coin in which all credit money is redeemable, while bronze and brass, of lower value than copper, are necessary for small change, in the payments for goods at retail, and for petty services. As the rate of production and the volume of wealth increase, more of it takes the form of means of production or reproductive wealth, larger values need to be expressed, and the volume of metallic currency increases rapidly, but the ratio of increase of credit currency is still greater, so that, in such countries, both gold and silver become secondary to credit money. They remain chiefly as means of adjusting balances, and giving stability to the credit currency, which becomes the chief means of payment.

If a country makes abundant provision for the issue of large bills or notes, whether of the government or of banks, its use of gold will be less in quantity than if it does not; and if it provides an abundant issue of small bills, its use of silver will be less. Gold and silver are hardly, in most countries, competing currencies, but gold is rather the currency of capital and the wholesale trade, and silver of labor and the retail trade, except in so far as bills and notes, large or small, may supersede both gold and silver. England, though having the single gold standard, uses about $100,000,000 worth of silver, all of which is subsidiary, but all of which, owing to the absence of small bills, is in active and much-needed circulation. The silver coinage of England under Victoria includes a crown containing 436.35 grains (five shillings), a half-crown containing 218.17 grains, a florin 174.54 grains, a shilling 87.27 grains, a sixpence 43.63, a groat 29.06 grains, and a threepence 21.81 grains. The standard for silver coin from the second year of Elizabeth to the present day has been 11 $^1/_{10}$ parts of pure silver to nine-tenths part alloy.

135. Changes in British Coinage.—A few gold coins were struck by English kings previous to the Norman Conquest, but the regular currency was silver. A "gold penny" was coined

in 1257, which was of the value of twenty pence, and is now so rare that it sold for £140 in June, 1864. It contained $45\frac{1}{2}$ grains of pure gold without alloy. In reign of Edward III. (1327-1377) there were four issues of gold coins, viz., florins, weighing 108 grains, current for 6*s.*, half-florins, and quarter-florins ; nobles, half-nobles, and quarter-nobles. The noble had $138\frac{6}{13}$ grains and was current for 6*s.* 8*d.* It had $\frac{1}{192}$ of alloy. This proportion was the only one in use prior to Henry VIII. In reign of Edward IV. the gold coins were the rose noble or rial, the half-noble, quarter-noble, angel, and angelet. The weight of the noble or rial was 108 to 120 grains, and it was current for 8*s.* 4*d.* The angel, so-called from its bearing a figure of the Archangel Michael slaying the dragon, contained eighty grains, and was current at 6*s.* 8*d.* The angelet was a half-angel. Some of these sold in 1864 for from £10 to £30. Sovereigns, stamped with an image of the sovereign on his throne, appeared in the reign of Henry VII. (1485-1509), were of the weight of 240 grains, and current for £1, or 20*s.* In Henry VIII.'s reign there were at first double sovereigns, sovereigns, rose nobles or rials, George nobles, angels and half-angels, crowns and half-crowns. Later, in years thirty-four and thirty-five of his reign, came the pound sovereign, in which the weight was reduced from 240 grains, current for £1 2*s.*, to 200 grains, current for £1, or 20*s.* At the close of his reign the pound sovereign contained 192 grains, and was made current for 20*s.* The crown at the latter date contained forty-eight grains, and was current at 5*s.* In the reign of Edward VI. (1546-1553) the sovereign sank to $174\frac{6}{11}$ grains, and was still current for £1. Double and triple and six-angel pieces were issued. In the reign of Mary the sovereign was restored to 240 grains, and made current for £1 10*s.* The rial, 120 grains, passed for 15*s.*, the angel for 10*s.* In this reign coins passed from the hammered stage and were milled. The sovereign returned to $174\frac{8}{11}$ grains, and was current at 20*s.*, the fineness being twenty-two carats fine gold and two carats alloy. At the union of the two kingdoms under James I. there were issued unites, double crowns, Britain crowns, half-Britain crowns, and thistle crowns. The unite weighed only $154\frac{26}{31}$ grains, and was current for 20*s.*, or £1. The "unite" or gold pound of the time was also called a "laurel," and receded in weight during the reign of James I. to $140\frac{20}{41}$ grains. Under Cromwell there were fifty-shilling pieces, twenty-shilling pieces, or "broads," containing $140\frac{20}{41}$ grains, and half-broads, the broad being equal to the pound. Under Charles II. the term

guinea came into use, the coinage being of a five-guinea piece, weight 647 18-89 grains, current for £5, a two-guinea piece, a guinea, and half-guinea. The guinea for a term after 1663 circulated at a value of 20*s.*, in 1694 at 21*s.* 6*d.*, from 1694 to 1696 at 30*s.*, from which it sank again to 21*s.* 6*d.* before 1702. The guinea or pound receded to $129\frac{33}{89}$ grains. In the reign of George III. sovereigns were again issued as the equivalent of the pound—the weight again falling to $123\frac{274}{1000}$ grains. In the reign of Victoria this continues to be the weight of the gold "sovereign," which stands for the pound sterling. Since 1816 it has been the standard unit of coinage.

The pound sterling, the national unit of English currency, is reputed to have been originally a pound troy of silver.* But works on English coinage † first describe the coinage of the silver pound as occurring in the reign of Charles I. (1625-1649), when it consisted of 1858 grains of silver, of the standard of $11\frac{1}{10}$ parts fine silver, to $\frac{9}{10}$ part alloy. The other silver coins of this period were the 10*s.* piece of 929 grains; the crown, $464\frac{1}{2}$ grains (declined from 480 grains in reign of Edward VI.); the half-crown, $232\frac{1}{4}$ grains; the shilling, $92\frac{3}{4}$ grains (declined from 96 grains since Edward VI.); the sixpence, $46\frac{1}{4}$ grains; the groat, 31 grains (declined from $42\frac{1}{2}$ grains since Henry VIII., and 48 grains since Edward IV.); the threepence, half-groat, penny, and halfpenny. Prior to Henry VII. the silver coinage seems to have been confined to groats, half-groats, pennies, halfpennies, and farthings, though testrons (shillings), having 144 grains each, were coined in his reign.‡

After about 1600 the cheap gold of Mexico and Peru, pouring in upon England, maintained a lower value in the bullion than it was worth in coin, and hence was coined largely, draining England of silver. The relative quantities of the two metals coined furnishes no criterion of their respective circulation, but only of their relative cheapness, as it is always the metal which is overvalued in coin that seeks the mint.

COINAGE.	GOLD.			SILVER.		
	£.	s.	d.	£.	s.	d.
Under Charles II.,	177,253	19	5	3,722,180	2	8
" James II.,	2,113,638	2	8	518,316	9	5

* "The Silver Pound," by S. Dana Horton, p. 74.

† Henfrey's "English Coins," p. 222.

‡ Henfrey's "English Coins."

COINAGE.	GOLD.			SILVER.		
	£	s.	d.	£	s.	d.
Under William and Mary,	443,328	15	6	79,026	9	4
" William III.,	2,975,550	16	1	7,014,047	16	11
" Anne,	2,484,531	8	4	527,469	10	4½

From 1787 to 1798 silver coins became so scarce in England that it was sought to supply the deficiency by coining Spanish-American dollars and half-dollars countermarked with the head of George III. They passed current at 5*s*, and later at 5*s*. 6*d*. Since the recoinage of 1816, crowns, half-crowns, florins (2*s*.), sixpences, threepences, and groats of silver have been issued. From 1685 to 1694 tin halfpennies and farthings were coined. Pennies, halfpennies, farthings, half-farthings, and quarter-farthings have been coined of copper in most reigns since Charles II. In 1874 the London mint coined fifty-four tons of copper pence and halfpence, and one hundred tons of bronze pence, halfpence, and farthings. Its largest issue of bronze coins was 134 tons in 1875. Silver and copper coins of small value facilitate the minute subdivision of the results of labor among a large number of persons, and at the same time make it possible to gather up small values from an infinite number of customers in a way to promote great enterprises. The great daily press depend on a copper coinage, as the retail trade generally depends on one of silver. So of cheap fares, drinks, and food.

The pound sterling, or twenty shillings, of England has continued for centuries to be the unit of account, though seldom any silver coin representing it existed or could circulate, owing to the fact that gold was continually the cheaper and cheapening metal. The sovereign, the broad, the double-angel, and the guinea have at various times stood for the pound sterling because the quantity of gold in these coins was worth less than the standard value of the coin, while the quantity of silver required for the silver pound would have been worth far more. As silver pounds, if coined, would have been melted, it was impracticable to coin them. It is usual to say that, prior to 1717, England had the silver basis, with gold rated according to its value in silver ; that from 1717 to 1816 gold and silver both had free coinage and unlimited legal tender; and after 1816, silver has constituted a subsidiary coinage and gold has been the one standard unit of coinage.*

* Mr. S. Dana Horton ("The Silver Pound," Introduction) shows that in common discussion the term standard may have one or the other of nine distinct meanings, viz., it may mean—

136. The Standard.—The influence of the volume of each kind of money, or means of payment, in circulation, upon the value of the other, forms one of the most complex topics in finance. An increase in the volume of each kind of money, including paper, tends first to cheapen itself relatively to the others. If its convertibility into the others be so sustained, as to prevent it from dropping out of currency into a mere commodity, it must soon effect a greater absolute cheapness in all kinds of money, relatively to commodities. This cheapness of money, or fall in its purchasing power, is indicated by a rise in the prices of commodities generally, and is known as inflation. It has usually attended periods of special prosperity and activity. The disputes among economists, as to the effect of an increase in the volume of money on prices, grow largely out of their differences of opinion as to what shall be called money. The bullionist, who deems only gold and silver money, will hold either that paper money does not raise prices, or that, if it does, the rise is mischievous. The inflationists will vary also among themselves as to the kinds of paper credit which have the effects of money, in increasing or lowering its purchasing power. Many who freely admit that large issues of bank notes, or government notes, may inflate prices, will deny that bank deposits and discounts, or interest-bearing government bonds, or railway bonds or other forms of exchangeable credit, will have the like effect.

Thus money is a subject which begins on the solid earth, and, without well-defined lines of demarcation, passes upward into the clouds. The degree in which it is composed of value, or of credit, changes by insensible gradations. Economists strive to draw a line where it shall stop, but cannot agree on the line. One, with Amasa Walker, says only coin of full weight and fineness is

---

1. The fineness of money metals, or whether it has a given proportion of pure metal to cheap alloy.
2. The fineness prescribed by law for a coin.
3. The weight prescribed by law for a coin.
4. The national unit of account (pound, dollar, franc, marc), regarded as a denomination, name, or title, as distinguished from the coin which may at various times be its body or substance.
5. The national unit of coinage, being the coin in body and substance of which the unit of account is the abstracted idea.
6. The full legal tender money of a country.
7. The kind of such money chiefly in use.
8. The kind of money the manufacture of which is free, and which is the par or nominal standard by which the other moneys of a country are rated.
9. The monetary system of a country in general terms.

money. Another says coin and notes issued on deposits of coin, after the method of the Bank of England, are money. Another will include all bank notes, while redemption in coin is maintained on them. Another defines money to include all exchangeable credit, and affirms, with MacLeod, that even coined money circulates on credit. Another includes bank deposits and discounts, and so on.

These differences, as to what constitutes money, are accompanied by divergent views as to the nature of the actual standard, or measure of values, against which values of property balance and prices result. The bullionist will say it is the quantity of coin in use. The banker will say it is the quantity of coin and redeemable paper. The advocates of a credit currency will say it is the aggregate volume of gold and silver coin, and of exchangeable credit, in any one country. Finally, the internationalist will say, it is the general volume of all three, in all countries which exchange together. The former quantities are nearly computable for a single country. The latter is incomputable, even for one country. Still more so for all. Thus money, like the ladder in Jacob's vision, has its feet on the earth and its summit in the clouds. It may be added that such is its utility in whatever form, that there are never wanting those who can see the angels of heaven descending and ascending upon it.

137. The Ratio between the Money Metals.—England uses more silver money than the United States, because she makes no provision for the issue of small notes of from $1 to $10 in denomination. Germany also, though aiming to have a currency of gold only, uses far more silver than France or the United States, because the condition of the German people, their frugality and low rate of production, render silver more indispensable to them than gold.

The coined and paper money of thirty-eight of the world's principal nations (excluding China) was compiled by the director of the mint in 1883, in the following chart (in which each number represents millions of dollars) :

Paper.	Gold.	Silver.		Total specie.	Total paper and specie.
		Full tender.	Limited tender.		
3,832	3,333	2,277	434	6,045	9,875

Gold and silver bullion maintain the same value relatively to other commodities, only proximately and not absolutely. Usually

for a century, and in a less perfect manner for several centuries, gold has been worth from fifteen and one-half to sixteen times its own weight in silver, and on this expected ratio the coinage of the two metals in Europe and America has been adjusted, the legal ratio being one to sixteen in America, and one to fifteen and one-half in Europe. Since 1873 silver bullion has declined relatively to gold bullion in purchasing power, until at the present time it requires about twenty-two times a given weight in silver to equal in value the same weight in gold.

Adam Smith says that, before the discovery of the mines of America, an ounce of gold was worth only from ten to twelve ounces of silver, but by 1650 they came to bear the relative values of one to fourteen or fifteen. Both metals sank, in their purchasing power, relatively to labor and commodities, but silver the more rapidly, owing to its more rapid increase of production. The Western continent has ever since been the source of supply to the Eastern—the migration of the precious metals being always in the opposite direction to the migration of population. In India silver has always been held in higher esteem, relatively to gold, than in Europe, as both the money and the ornaments of the people are of silver. At the mint of Calcutta, a century ago, an ounce of fine gold was held worth only fifteen ounces of silver, and in the markets of Bengal and Madras somewhat less. In China the proportion was then and is now only one to ten, and in Japan, at least until recently, one to eight. The population of China and India are so large, and their customs so fixed, that they maintain a higher relative value on silver, as compared with gold, than is maintained by Western nations.

Silver and gold are produced, in America, in about the relative quantities of twenty-two in weight of the former, to one of the latter, but of these twenty-two parts about seven were, for a century, drawn off annually to India, leaving only fifteen parts of silver to one of gold to supply Europe and America. The theory was propounded more than a century ago by Mr. Meggins, and combated by Adam Smith,* that the relative values of gold and silver depended on the relative quantities produced for circulation in Europe. Meggins held, therefore, that if the drain of silver to India should stop, the ratio between the two metals would fall to one of gold to twenty-two of silver. Smith thought it would not. But in 1873-6 the drain to India stopped, or nearly so, and,

* "Wealth of Nations," Book i. p. 97. McCulloch's Ed

whether from this or other causes, the relative value of silver fell as Meggins predicted.

All European nations, and the United States, have judged fit, in consequence of this fall, to cease to coin silver, at the will of the holder, in the proportions of one to fifteen and one-half, or sixteen, as they had previously done.

138. Exchangeable Credit as Quasi Money.—Credit consists in giving faith or belief to a promise or to a statement of a fact. If the promise or statement relates to a value, and is of a kind which many persons will have faith in, one of these persons will take it from another, as equivalent to the fact which it states or the value it promises. Hence, about as easily as goods became exchangeable, credit becomes exchangeable. Exchangeable credit has so many effects analogous to money that certain economists treat it as credit money. It is not necessary to the creation of credit money, so-called, that its issuers shall suppose or intend it to be money. It is only necessary that it shall act as a convenient substitute, and perform the functions, of money. In finance as in the enlistment of troops, the substitute, being accepted for service, fights as principal, and that for which it acts as substitute goes about other business, or is retired.

Bills of exchange, and promissory notes of private persons and firms, bank notes issued to circulate as money, bank deposits and checks, government notes, commercial accounts, store orders, government and corporate debts, all help to make up this indefinite volume of exchangeable credit. It includes all credits which are capable of easy subdivision, like bank accounts, or ready exchangeability, like negotiable notes, so as to be used with more or less frequency and regularity as means of payment of debts, and purchase of goods and services.

In so far as commodities are exchanged, through the use of either of these media, without any payment for them in coin, they become substitutes for money, doing its work upon very different terms as to cost.

139. Bills of Exchange and Notes.—Bills of exchange are used as substitutes for gold and silver in international trade. A bill of exchange is a draft or order for the payment of a certain sum of money, drawn by the vendor or consignor of merchandise, either sold or sent to the consignee to be sold, whereby the consigner of the goods requests the consignee to pay their price to a person named, or to some one to whom he shall order it paid. As to the bill, the consignor becomes the drawer. The person, on

whom it is drawn, becomes the drawee. The person who is to receive the payment is the payee, and when he transfers the bill he becomes endorser. If but one such bill existed, it would not supersede coin, but would have to be paid in coin by the drawee. But when many such bills are drawn, they come to represent, not only the several prices of all the merchandise shipped from place A to place B, but also all the return merchandise shipped from B to A. The bills drawn by Rio Janeiro merchants on London merchants for the price of coffee, hides, caoutchouc, diamonds, silver, wool, and tropical fruits, shipped from Rio to London, are found to nearly equal in amount the bills drawn by London or other foreign merchants somewhere, on those in Rio for cloth, hardware, furniture, machinery, etc., shipped by them to Rio. If both classes of bills could be got together in one place, with the persons from whom they are due, and to whom they are due, it would be found that the Rio exporters had shipped to London just coffee, hides, caoutchouc, diamonds, silver, wool, and fruits enough to pay for the cloth, hardware, furniture, etc., shipped by the London merchants to Rio.* London and Rio are even within a few dollars, not more than two or three per cent. of the whole. Obviously, therefore, no gold need be paid or shipped on any of these bills. It is only necessary for the Brazilian importer, who owes money in London, to pay it to the Brazilian exporter, to whom money is owed in London, and for the London merchants to do the same, provided what each pays at home is credited on what he owes abroad. This is done by the importer in Rio buying the draft made by the exporter in Rio, and the importer in London buying the draft made by the exporter in London, and using it in payment of his own debt. The price of exchange, or the rate at which drafts can be bought, is said to be in favor of Rio when drafts on London are so plenty in Rio that they can be bought there for a small discount from their face value. It is against Rio when drafts in Rio, on London, sell at a premium. The amount of this premium or discount is supposed to be adequate to cover the risk of being obliged to incur the cost of transmitting the specie, including interest, insurance, and profits.

Thus no payment at all, in money, need be made for these purchases, on either side, so far as their values offset each other, and

* Where this is not in fact true as to the shipments between any two places, it is made true in effect by taking in such other places as have made shipments and drawn drafts which in the aggregate will balance.

money as a medium of exchange is dispensed with, but the bills on both sides become, for the time being, substitutes for the money, and hence a form of credit money.

Promissory notes of private persons and firms become substitutes for money, and a species of credit money, when given in payment for merchandise in such numbers as to be offset against each other, and so paid by cancellation. When the condition of private credit is such that notes of ordinarily solvent customers, payable two or three months ahead, can be taken by their holder to a bank or broker, and cash or credit obtained for them by their holder, wherewith to pay his old debts, or buy new goods, and when, over long periods of time, private credit remains so stable and secure that, on the maturing of each set of notes, they can be taken up or paid with the proceeds of the sale of the goods for which they were given, and when these proceeds are often themselves the notes of persons to whom the goods were sold, it is obvious that many goods will pass from producers to consumers on a currency or means of payment which consists wholly of private promises to pay. And when all the promises to pay given by merchants in Syracuse for cloth and iron are taken to New York, and there compared with like promises given by New York merchants for salt, purchased in Syracuse, it is obvious that the system of offsetting these notes against each other will pay them, as in the case of bills of exchange. To the extent this is done all the merchandise, for which they were given, is in fact exchanged without any interposition of money. And, to the extent this is done, the notes themselves have been a substitute for money, and therefore a form of credit-money.

140. Money of Account.—Commercial accounts of all kinds may assume a payment in coin as to be made, which in fact is never made in coin. Hence the term money of account comes to mean ideal money—not coined money. A shoemaker and farmer reside near each other. The shoemaker can do $1,000 worth of work each year in making shoes, and wants $500 worth of crops from the farm, but the farmer can only take $100 worth of shoes. He opens an account with the shoemaker, and in the course of the year sells him $500 worth of food and buys from him $100 worth of shoes, leaving the shoemaker owing him $400. But the shoemaker has also made and sold $100 worth of shoes each for the butcher, blacksmith, wagon-wright, and carpenter, against each of whom he has accounts for shoes furnished, $100 each, being just enough to pay the farmer. If now the butcher, black-

smith, wagon-wright, and carpenter have also done work for the farmer, whereby he owes them $100 each, evidently the shoemaker need only cancel his accounts against them and let them cancel their accounts against the farmer, to place the farmer where he can cancel without loss his accounts against the shoemaker. Thus $1,200 worth of services have been exchanged nominally for money, but really for the abstract idea or conception of money. Each service when rendered was charged for at a certain sum in money, but really no money was used. Hence, the book accounts were a substitute for money, had the effect of money, and are therefore a form of credit-money. From these the term "money of account" has been borrowed, to mean, at first, that kind of money which consists of accounts which offset each other, and enable payments to be made without the actual use of money. From this the term "money of account" rises to mean money considered as an intellectual and financial conception merely, as one might say "money in your mind's eye," or money in thought, as distinguished from money physically present. "Money of account" is thus the pound, the dollar, the marc, the franc, when considered not as a coin, but as a denomination, name, or title—a mere idea of which the coin is the body or substance.* All forms of credit tend thus to idealize money, and enable exchanges of commodities to be made, by the use only of instruments which express money of account, without the intervention of coined money.†

141. Bank Deposits and Checks.—These, also, become a form of credit-money. The system of bank checks, on deposits, is a system devised by the minor banks of England to thwart an act of Parliament which was designed to limit to the Bank of England, and a few others, the privilege of issuing their own notes as a means of discounting, or "cashing" the notes of their customers. The minor banks said to their customers: "We can not, owing to this act of Parliament, issue to you our notes, but we can give you a credit on the notes you may leave with us, as if a sum named had been deposited by you in our bank, and on this you can draw at pleasure, by your check. In this way the act of Parliament was wholly thwarted, and a new form of credit-money was created, more effectually than if every bank had been permitted to discount its customers' notes with its own bills. To such an extent have the deposits and checks become a substitute for money, and a means of payment and of credit, that

* "The Silver Pound," by G. Dana Horton, p. xxi. † *Vide* Note to Sec. 157 *post*.

in the payments made through checks, for goods sold, in the city of New York, amounting to from $80,000,000 to $100,000,000 daily, only about three per cent. are usually paid in coin or bank-notes.

142. Bank Notes.—Bank notes are the form of exchangeable credit which it is most easy and natural to regard as money. A bank is a shop for the sale of money and credit, coined money, and credit money, in exchange for securities which ensure to it the payment of money after an interval of time. All the obligations of a bank to its customers are, at all times, payable on demand. Most of the securities and assets will be obligations payable at a future period. It is of the essence of all banks that they are insolvent if all the holders of their obligations call for them at once, since they have not the right or power to call upon all the persons indebted to them to pay at once. Banks are founded upon aggregated credit, deal in credit, rest on credit, and require a certain condition and stability of general credit for their continuance. They are storehouses for the aggregation and storage, purchase and sale, of credit and cash, in the same manner as merchants' warehouses are storehouses for the aggregation and sale of goods, and as elevators and boards of trade, together, constitute a market for the collection and sale of grain and agricultural produce. In Russia, grain is dealt with in a manner so nearly analogous to banking, that grain markets are called grain banks.

Credit must be aggregated, in founding a bank, before banking business can be done, because, if a bank loaned only its own capital, it would no sooner get all its capital loaned than it would be out of business. But, by presenting to the business community an imposing aggregation of credit, and compelling confidence, it attracts the deposits of its customers to an amount from two to six times greater than its capital, and thereupon its profits chiefly ensue from lending the money of its depositors.

The credit aggregated, in the degree necessary to give the bank the confidence of the public and of depositors, in various ways, in banks of large business and long standing, is due chiefly to many years of safe, prompt, and honorable dealing. In the first instance, however, there is usually a stacking together of public securities, or credits of some kind, such as government or state bonds, national debts, gold or the like, in whose stability the public have confidence, and the bank virtually says to the public: "Look at these and trust us on their account." *

* When the government of Russia desired, in 1834, after "scaling" the government paper money, which had circulated at only one-fourth its par or nominal value, to

The banks of Venice (founded in 1711), Genoa, and England originated in loans made to governments, on the faith of which government revenues were indirectly or directly pledged, and the banks, as chief creditors of the government, became its fiscal agents. The Bank of France, Imperial Bank of Germany, that of Austria, of the Netherlands, of Russia, are national institutions of great magnitude, modelled in a more or less imitative spirit after the Bank of England. One of the burning questions pending in the politics of the United States from 1790 to 1833 was whether the United States should have a national "Bank of the United States," which should perform like functions toward the government and banks of the United States as those performed by the Bank of England. Alexander Hamilton was the principal advocate of the policy, Andrew Jackson its final opponent. The first national bank was founded nearly simultaneously with our government, under Mr. Hamilton's influence, and the second national bank expired under the veto of the bill to renew its charter, which veto constituted one of the salient features of Jackson's administration.

Banks of issue and redemption issue paper money, and purport

---

enter into a joint arrangement with the banks of Russia, whereby the banks should, as agents of the government, redeem at par the new government notes, to be issued in exchange for the old at the rate of one of the new for four of the old, the Czar collected in the fortress of St. Petersburg 130,000,000 roubles in gold as this basis of redemption, and invited the bankers and merchants of the empire to come in and look at his gold, as a means of inspiring confidence in the ability of the government to redeem the new currency at par.

Again, under the existing national banking system, in founding a national bank, $100,000 in government bonds were purchased by the founders and deposited in the Treasury at Washington, as security for the redemption of every $90,000 of bills issued by the bank, all of which were furnished them by the government, engraved at the government office and delivered to them in exchange for the bonds. This secures the redemption of the bills. At present the government of the United States leaves the business of banking open to free competition, so far as banking consists in receiving deposits and discounting notes. So far as it consists in issuing notes, the redemption of the notes is secured by pledge of government bonds. No system has yet been devised or conceived whereby depositors can escape the risk involved in the custody and lending of their money by the banks on losses by defalcations of its officers. The capital of the bank, however, when called in from its function of securing the redemption of the bills of the bank, which is its primary liability, is then liable to depositors to the extent it will go, for any inadequacy in the assets on which the bank has made its loans to pay its depositors. The quarterly statements which our national banking law requires the bank to publish of their assets and liabilities is supposed to throw some light to guide depositors as to the degree of credit in which the bank should be held, and the government system of inspection is supposed to be imperfectly and in some small degree adapted to detect substantial untruths in these quarterly statements. It has, however, seldom been equal to the task.

to redeem it in coin. Banks of deposit and discount are those which make loans on time bills, and derive their incomes chiefly from lending deposits. As to their form and organization, they may be either (1) *quasi* government banks, like the Bank of England, Bank of France, Imperial Bank of Germany, etc., or (2) corporate and joint-stock banks, founded wholly by private capital; and the latter are, in the United States, still further divided into (1) national and (2) private banks, the former meaning those which issue bills secured by deposit of government bonds, and the latter those which at present issue no bills, being restrained from issuing bills by a federal law, taxing them more for issuing bills than they could afford to pay.

What have been known in the United States as State banks were corporate banks, based chiefly or wholly on private capital, but authorized by the laws of the several States. In a few cases as in that of the State bank of Iowa, and of Indiana, they were institutions in which the State held stock and had a part control. In most cases, however, they were formed under a general law which authorized any three, five, or seven, or more persons to go into the business by putting up securities to the amount of the alleged capital, which might consist of bonds of the State, or of some city or town, or private mortgages on real estate. So precarious were many of these securities that the currency or notes issued upon them had a very fluctuating value. The banks acquired an unsavory reputation, being called "wild-cat banks," and the like, until at the outbreak of the rebellion in 1861 most of them collapsed and the circulating notes of the remainder were retired. The national banking system was devised to take their place. Among these State banks, however, those of Massachusetts, Rhode Island, New York, Indiana, and Iowa bore a good reputation and in great part redeemed their paper. So unpopular had the principle of banking become in many of the newer States that in one at least, Michigan, the constitution prohibited the creation of a bank.

143. Government Notes and Debts.—Government debts are seldom recognized as an issue of credit-money, and some mistakes in legislation have been due to this oversight. In the war of the American Revolution, 1776 to 1783, the paper money known as "Continental money" was an issue of government debt intended to circulate as money, which was repudiated and became worthless ultimately, for lack of any provision for redeeming it in coin, for funding it into interest-paying bonds, or for making

any other valuable financial use of it. A government debt must be made a source of income to its possessor or it will lose all value. Hence, to issue such a debt without provision either for redeeming it, paying interest on it, or funding it into interest-paying debt, is to repudiate it in advance.

The Confederate debt of 1861–4 met the same fate as the Continental money, for the same reasons. The last official sale of Confederate money was made at the rate of $1 of coin for $1,200 of the notes. The government avoided repudiation by what was then deemed, and felt to be, the most drastic system of taxation the people could bear. The duties on imports were raised to rates which could only have been enacted after the majority of the representatives of the free-trade idea in Congress had withdrawn, leaving the protectionists in the ascendency. Fifteen years after the war was over, the free-trade theorists and opponents of "inflation," including Prof. Adams, in his work on "Debts," Prof. Laughlin in his "Elements," and others, have raised the cry that the timidity of the government caused the debt, as it should have raised the entire expense of the war by taxation as fast as it was needed. In fact, it was only by getting anti-inflationists and free-traders of these views out of Congress, or into a helpless minority, that the potency of the revenue laws could be increased in the degree that they actually were. The "boom in prices," and the confidence in profits, caused by the rapid inflation through government money, set on foot an energy of production, by means of which heavy taxes were freely paid. The feeling of capacity to pay heavy taxes arose only as the people found that the stagnation in business, which had oppressed the country for the seven years prior to the war, had given place to an era of large profits and intense prosperity.

The duties on imports were pledged sacredly to the payment of interest on the bonds. Holders of notes bearing no interest were, until near the close of the war, invited to exchange them for the bonds.

The bonds, during the war, fell with defeat, and rose with victory. As the notes kept pace with them, and were the nominal standard, in which even gold coin was quoted, the fall in both bonds and notes was indexed by what was called the premium on gold.

With the final success of the Union arms, the bonds rose to 75 per cent., and at the end of fifteen years passed to a premium. The bonds at 6 and 7 per cent. were then exchanged for those bearing a lower rate of interest, until a 3 per cent. bond could be

negotiated at par. The greenbacks remained below par, as was indicated by gold being quoted at a premium, until 1879–80, when specie payments were resumed.

No portion of the national debt, except the greenbacks, was regarded as credit-money within the United States. In our exchanges with Europe, however, the national interest-bearing bonds performed a most important function, in which, by virtue of their easily transferable credit, they came to resemble money. At the close of the war, about $2,700,000,000 of them had been issued, and of these all, but a few scores of millions, were held in the United States. They formed, however, an excellent security, more acceptable in Europe than private or corporate bonds, because better known and better secured as to their interest by our coin revenue. The people holding them could make more than their rate of interest in other investments, as industries of all kinds were intensely active to the verge of "kiting," which is the phrase when profits are rapidly and easily made on many things. The bonds were therefore exported at the rate of about $200,000,000 per year, until 1873, when it was computed at least $1,900,000,000 had been sent abroad. At this period the supply of bonds available for export was exhausted, and, hence, the period of inflated prices came to a sharp conclusion, known in finance as the panic of 1873. From 1873 to 1879–80, we were engaged in buying back these bonds or calling them in, and paying them off. The process pleased the people. They resisted or ignored the argument that the principal of the debt would earn more in the hands of the taxpayers than in those of the creditors. It has continued ever since, and the debt is now less than one-half its amount in 1865. The United States, at least, won the fame of being the only nation in the world which pays off the principal of its debts. The easy exportability of the bonds enabled the country, from 1865 to 1873, to consume more than it could pay for in products. This postponed for nine years the sense of exhaustion and impoverishment which it was the natural effect of the war to produce. In these respects the debt acted, internationally, as a substitute for an export of gold, and as a form of paper money and inflation, sustaining prices and prosperity, both in Europe and America. Since 1873, on the other hand, the rapid return and extinguishment of the debt, at the rate of nearly $200,000,000 a year, has operated in Europe and America as a contraction or withdrawal of currency, the effect of which has been everywhere visible in a declining scale of prices and a pre-

carious condition of profits, with great shrinkage in values, timidity in enterprise, and discontent on the part of labor.

144. The Volume of Credit.—This survey of the nature of credit shows that it consists of the aggregated faith of millions of individuals, in the future of the declared intentions of millions of other individuals, as to whether such intentions will be performed or not. The law can neither regulate the formation of these intentions, the faith of others therein, nor their performance. Hence, it can only regulate the volume of certain forms of credit, not of all forms. If it forbid bank notes, government notes, small bills, it will increase the degree in which the note which A gives to B on sale of a horse, or for a day's work, will circulate, perhaps with the endorsements of C, D, E, F, and G. If it enact that only the Bank of England shall issue its own notes for the notes of its customers, the other banks will checkmate the law by the system of deposits and checks. If it make paper money scarce, merchants will be obliged to give long credits, which are another form of credit-money neither so secure nor satisfactory as paper money. Hence, in legislation concerning the volume of paper or credit, the legislator is liable to be foiled by the elusiveness, subtlety, and variability of the principle of human faith.

145. Relative Cost and Economy of Coin and Credit—Fiat Money.—However simple may be the object, or commodity, of which we attempt to compute the ultimate and true cost, the calculation carries us out into an infinitude of values which are incomputable, and back to the very origin of things. To compute the ultimate and true cost of the inkstand from which I take my ink, I must assess it with its share of the losses that have been made in the manufacture of glass, and this, at the outset, is impossible. How, then, shall we attempt to solve a problem so much more difficult as the relative economy of coin and credit currency? Each is as essential to the other as sunshine is to rain, and air to sunshine. Economists, with the exception of Amasa Walker, are nearly united in the belief that credit money is more economical than coin, by nearly the whole cost of the coin.

The employment of gold and silver, exclusively, as money, is a matter no more within our choice than it would be to employ artificial irrigation, exclusively, as a means of moistening the fields. Credit attaches to those who show that they possess the gold and silver, as naturally as the rain descends. But if a currency of coin only, without credit, were possible, it would sub-

ject the nation, or aggregate society, using it, to an annual charge nearly or quite equal to the annual interest on the whole volume of currency so used, relatively to the comparative cost of credit money in any of its forms. But even this would be a vast saving on barter. For gold and silver have an intrinsic value equal, in every instance, to the commodities they exchange. This intrinsic value keeps parallel with the cost in labor of producing, though, as we have seen, it is the value they have that causes the requisite labor to be expended in their production, and not the labor so expended which causes their value. Having this intrinsic value, the ability of a possessor of cloth to effect an exchange thereof with the possessor of iron, through the services of an intermediate possessor of gold, involves the previous expenditure of as much labor, to produce the gold necessary to the exchange, as to produce the cloth or iron. But, by means of either of the forms of credit money we have named, the same exchange is effected through a medium which has no intrinsic value, and whose existence, ordinarily, does not involve an investment of an amount of actual capital equal to its whole volume. Hence Adam Smith says : "The substitution of paper, in the room of gold and silver money, replaces a very expensive instrument of commerce with one much less costly, and sometimes equally convenient. Circulation comes to be carried on by a new wheel, which it costs less both to erect and to maintain than the old one."

Yet we must not fall into the common error of supposing that the actual cost of credit money is merely the cost of printing or engraving the instrument of credit ?

It is the cost of maintaining the credit, of which the printed or engraved paper is merely the instrument of transfer. In the case of the greenback note, the form of credit money most familiar to Americans, the cost of maintaining the credit may have been the whole cost of maintaining the Government against the Rebellion, say $9,000,000,000, and the lives of one million men. On the other hand, some may assert that had the Southern Rebellion not been subdued, the Northern States would still have had wealth and honor enough to have paid the debt incurred, and redeemed the greenbacks issued in the effort. But this no man knows. It is certain, however, that the money cost of maintaining the credit represented by the greenback, in the mode in which it was actually maintained, was far greater than the volume of both the greenbacks and the national bonds, since to these must be added the swollen volume of annual taxation, from 1861 to

date of payment. Such complex facts are not reducible to accurate computation, but it is clear that the greenback note cannot be instanced as a form of credit money that cost little, or that cost only the cost of engraving the paper on which it was written.

The Bank of England note is just as far from being cheap, when we estimate the whole cost of maintaining the Imperial Government, whose national debt constitutes the basis on which the first £17,000,000 of Bank of England notes are issued. For every note issued by the bank, over this sum, there must be a sovereign in gold deposited, to remain in the vaults of the bank until the note for which it is issued returns for redemption.

An accurate computation of the exact cost of maintaining the credit of the various forms of credit currency is a very difficult one to make. The losses incurred on those forms of credit currency which have failed of ultimate redemption, such as the Continental money of the American Revolution—both that issued by Congress, and the similar issue by the several colonies—the losses by bank failures to redeem, which were common in the United States prior to 1860, the losses by the failure of the French assignats,* and of Law's credit-money schemes,† and the more recent losses by the collapse of the Confederate debt and money, all constitute part of the general tax imposed by credit money on the world. The annual cost of paying interest on the credits, or securities, on which a system of redeemable credit money is usually based, cannot, of course, be wholly charged to that credit system. England would still have had a debt if no Bank of England notes had been issued. America would still have incurred a vast expenditure if no greenback note had been issued, perhaps a greater one than was actually incurred, Still the forms of credit that actually exist are involved in origins so expensive that they remind us of Lamb's ingenious story of the discovery of the excellence of roast pig by the Chinese, in burning down a barn in which a pig was accidentally roasted. It is difficult, in such a case, to separate the cost of burning down the barn from the cost of roasting the pig. So, great aggregations of credit money have usually been connected, directly or indirectly, with the struggles of government for self-preservation. It may seem severe, or even absurd, to say that great credits cannot be built up without great sacrifices, and it, at least, amuses us to suggest that this is as unnecessary as it is to burn down a barn in order to roast a pig. In fact, however, thus far all efforts to establish a sound and redeemable credit money, apart from the concurrence of national struggles

* *Vide* p. 369. † *Vide* p. 369.

and great debts, heavy taxation and stringent popular burdens, have only resulted in a bogus form of credit money, which was a discredit to all parties. Experience leads us, therefore, to doubt whether this particular kind of pig can be roasted without burning down a barn. But if the cost of maintaining a credit currency is not accurately computable, how can it be known to be absolutely economical?

It is not so clearly known to be economic, by computation, as felt to be economic, by experience and use. In periods when the efforts to maintain a credit currency have failed, and involved a great loss, the system has been severely denounced. In periods when the basis for its maintenance has existed, its great popularity has caused visionary schemes to be propounded for maintaining it without any basis whatever. Proposals to establish "labor money," and "fiat money," on the theory that credit money is merely an implement of exchange, which requires only common consent to manufacture and use it, overlook the nature of credit itself as being, not an independent and original fact, but only, as it were, the shadow or effect of an antecedent fact, viz.: ACHIEVEMENT. Credit can only be made to follow where achievement, power, victory, success of some kind, has gone before. Something creditable must be done before credit can exist. It cannot be conferred of man's voluntary will. Hence the notion, propounded by visionaries, that men can agree together, to give every man who will work an hour a certificate that he has done an hour's work, which certificate, on presentation to any person having a meal of victuals to sell, will cause him to sell the meal, is merely one of the amusements of idle minds. It has no place in economic science, and will never be actual in human experience.

The extremists called bullionists contend that no money but that which has intrinsic value should circulate. The opposite extremists called "fiatists" propose to adopt a money, by consent, behind which there is no previous basis of achievement, power, or capital capable of commanding confidence or consent. Between these two the average common-sense world must walk, continuing to accept, as money, that which the circumstances of their environment and education enable them to believe will exchange for money when they want it.

146. Variations in the Volume of Money.—Mr. Hume says:

"In every kingdom into which money begins to flow in greater

abundance than formerly, every thing takes a new face; labor and industry gain life ; the merchant becomes more enterprising, the manufacturer more diligent and skillful; and even the farmer follows the plow with more alacrity and attention."

It is claimed that a signal service was rendered by the Macedonian Empire to mankind in seizing the collected treasure stores of uncoined gold and silver which, according to the barbarous customs of an earlier epoch, the monarchs of the Eastern world had massed at Gaza, Persepolis, and like points, coining it into money, and issuing it to the world in payment for labor. All payments become, in the last analysis, payments for labor. It is asserted that more gold and silver coin were in the hands of men, in the third and fourth century before Christ, than all Europe possessed at the beginning of the eighteenth century after Christ. The civilization and the emancipation of man under the Roman Empire were largely due to an increase in the volume of money. Certainly the tendencies toward the abolition of slavery, and the equalization of races and conditions, which marked the culmination of the Empire, were but the legal expressions of an industrial equality, wherein money had superseded the lash, as the inducement to labor. It is doubtful if, without money, it is possible to organize labor on any large scale, or bring about the association of men, except by force and in slavery. Money, by affording the medium in which wages can be paid, and services and commodities obtained, by an easier mode than fighting, becomes the first substitute for force, and hence the most efficient cause of emancipation. On the other hand, "the fall of the Roman Empire," says Sir Archibald Alison, "so long ascribed in ignorance to slavery, heathenism, and moral corruption, was in reality brought about by a decline in the gold and silver mines of Spain and Greece, from which the precious metals for the circulation of the world were drawn, at the very time when the victories of the legions and the wisdom of the Antonines had given peace and security, and with it increase in numbers and riches, to the Roman Empire." Commenting on this remarkable passage, Gen. F. A. Walker (in "Money, Trade, and Industry," p. 114) says: "Doubtless this claim is far too large. Causes distinctly political and social had to do with the downfall of that mighty fabric of military enterprise, legislative wisdom, and administrative skill; but it seems to me that there can not be an intelligent doubt that the steady rise in the value of money, due to its increasing scarcity, contributed greatly to the impoverishment of

the people, the decay of commercial enterprise and the abandonment of agricultural lands, which sapped the foundations of the Roman Empire."

Equally evident is the connection between the modern revival of liberty and learning in Europe, since the fifteenth century, and the return of gold and silver into abundant circulation, through the draining of the Mexican and Peruvian treasures by Cortez and Pizarro and their followers, and the subsequent active working of the American mines. Even the recent additions to the supply of the precious metals, by California, Australia, Nevada, and Colorado, have imparted a wonderful impetus to all industrial movements and changes in social condition. This expansion in the volume of money increases the rapidity of industrial production. By means of its apparent effect in raising the prices, ultimately, of all commodities, even including land, but immediately of the more exchangeable and exportable ones in a higher degree than others, it thus appeals to the sense of profit in all men and causes them to trade with more rapidity. In order to trade they produce, for purposes of trade, and in order to produce, they employ, and in order to employ they raise wages, thus stimulating all to a larger production of commodities, and furnishing all with the means to maintain a larger consumption of commodities. The rise in prices of commodities, which results from an increase in the volume of money, is due to a decline in the purchasing power of the money itself, and not to any actual increase in the value of commodities.

In theory it must be admitted that the rise in prices felt by the speculative public in such periods, is at first an economic illusion rather than an increase of real values, but the illusion is so fruitful in calling into employment all idle time, idle money, and idle capital, by the appearance of being able to make money in every way and out of every thing, that a far larger amount of work is actually done, and more commodities are made, and to absorb these all men rise to a higher standard of living. Illusions may, therefore, be more fruitful of prosperity than facts, since the increased volume of mutual service they cause to be rendered by the members of society to each other is not an illusion, but is a part of the fact called Wealth, which is the subject of our study. It would not matter if every belief under which an increase of service, and an increased production of commodities, should occur among mankind, were an illusion. The growth of wealth caused thereby would be none the less substantial and solid.

It must be confessed also that, simultaneously with this expansion of prices and production by the cheapening of money, there are tendencies to charge immorality on those who are flooding the country in question with the cheap money, and on those who are availing themselves of the cheap money to pay off their debts or to speculate in commodities. Yet the country that allows, or causes its people to redeem, at par, with their commodities, this cheap currency, is enriched in a threefold way—(1) it increases its own volume of currency, prices, and production ; (2) it stimulates its exports ; (3) it finds the currency after all as good as that possessed by any other country. Nor does it matter whether the country is taking in a flood of new gold and silver, as Portugal, Spain, and ultimately all Europe were in the sixteenth century, or a flood of new paper, as England was during her wars with Napoleon, and the United States during her struggle with the rebellion. Hence it has often resulted that the most direct way to have good times was to have what the bankers would call bad money ; as the money gets better (dearer and scarcer) the times get worse.

147. The Single and Double Standard.—A country is said to have the single standard when it makes money, coined of one metal only, an exclusive legal tender in payment of all debts, public and private, and receivable for all taxes, and provides for its free coinage at its mints. England is a single standard country on the gold basis, because since 1816 its mints have coined no silver coins which are by statute unlimited legal tender, and it gives free coinage to gold, however abundantly it may be produced. By free coinage is meant that the holder of the quantity of bullion, required by law to be in a standard coin, may tender it to the mint, together with the cost of coinage, called seignorage, and will receive the coin in return. England, the United States, Germany, and France give free coinage to gold only.

In England, from 1256 to 1663, the statutes made certain coins of gold and others of silver a legal tender in payment of debts, or, as it was called, the "legal measure" of property. The quantity of silver circulating greatly exceeded the gold until about 1710. In 1663 silver was made the exclusive standard or legal measure, and so continued until 1717, when gold again divided the monetary throne with silver, the standard continuing bimetallic until 1816.

In 1816, by the statute ascribed to Lord Liverpool, gold was for the first time accepted as the material of which the unit of coinage

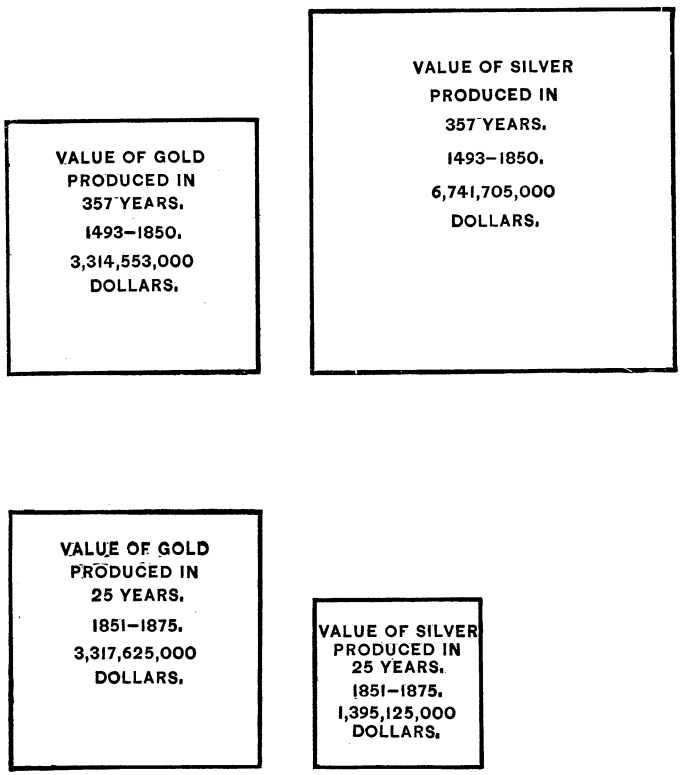
was made, and silver coins ceased to be legal tender in sums greater than £2. Mr. S. Dana Horton * seems to show that the Act of 1816 contemplated, on its face a free, coinage of silver, but that this result has failed for reasons of detail which were not fully contemplated by its framers. India gives free coinage to silver only, and is therefore a single standard country on the silver basis. France and the United States had, prior to the fall in the value of silver bullion in 1873, given free coinage to both metals. France, since 1873, in company with Italy, Greece, Spain and other countries, forming what is called the Latin Union, has suspended the coinage of silver, to avoid the supposed drain of gold involved in its further coinage, while it is depreciated. France, Italy, and the United States, therefore, are double standard countries in principle, but are temporarily denying free coinage to silver, and therefore are temporarily running with gold as the only metal of unlimited coinage. Still, in all these countries, their own silver standard coins are absolute legal tender, to an unlimited amount, for all debts. They are, therefore, bimetallic in practice, with a temporary preference for the single gold standard not stronger than has on former occasions prevailed in behalf of the silver standard.

Germany began in 1871 an effort to change from the silver to the gold basis, under the mistaken impression, as Lord Beaconsfield declared, that it was the gold basis that made a country foremost in commerce, instead of its being its foremost position in commerce that would make the gold basis possible or fit for it.† Prior to this experiment of 1871, Germany had a total coinage of 539 million marks of gold to 1,940 million marks of silver, or 3 2-3 marks of silver to 1 of gold. After twelve years of the experiment, the nature of the reserves held by the Imperial Bank of Germany, and which fairly indicate the kind of money in circulation among the people, was as follows :

---

* "The Silver Pound," by S. Dana Horton, p. 161.

† "Our gold standard," said Lord Beaconsfield, "is not the cause of our commercial prosperity, but the consequence of our commercial prosperity ; and it is very well for us to have it ; but you can not establish a gold standard by violent means. It must arise gradually from the large transactions of a country, and the consequent command it may have over the precious metals. When the various states of Europe suddenly determined to have a gold standard, and took steps to carry it into effect, it was quite evident that we must prepare ourselves for commotions in the money market not occasioned by speculation or any old cause which has been alleged, but by a new cause with which we are not yet sufficiently acquainted, and the consequences of which are very embarrassing." (Speech at Banquet, Nov. 19, 1873, at City of Glasgow.)



RELATIVE VALUES OF GOLD AND OF SILVER PRODUCED IN TWO SUCCESSIVE PERIODS.

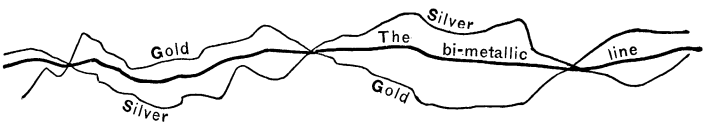
Bank of Germany.	Aug. 2, 1883.		Aug. 2, 1882.	
	GOLD.	SILVER.	GOLD.	SILVER.
	£7,667,850	£23,003,550	£6,985,000	£20,955,000

The circulation was still 3½ times as largely composed of silver as of gold. In her experiment, Germany called in one hundred million marks of her old gold coinage, and left out 440 millions which she was not successful in calling in—perhaps in circulation, perhaps gone into other countries. But of her old silver she called in two hundred million marks, and left 440 million marks not found. Thus she had called in one-fourth of her gold, and two thirds of her silver. Between 1871 and November, 1878, Germany coined 1656 million marks of new gold coins and 426 million marks of new silver, or four of gold to one of silver.* But she did not succeed in changing her circulation, in the degree that she changed her coinage.

In the Imperial Bank of Austria-Hungary the reserves are nearly two-thirds of silver, and in the Bank of the Netherlands they are about four of silver to one of gold.

The standard of coinage of a country furnishes no index, therefore, to the relative proportions in which the two metals will circulate in it. It may fix upon the single standard of gold and yet the chief part of its circulation may be silver.

The economic judgment of Europe and America concurs with substantial unanimity, both among practical bankers and theoretical economists, in the proposition that the two metals make a better equipoise against commodities than one alone would. If we suppose at random two lines of variation in value relatively to commodities, one for silver and one for gold, and then run a line midway between the two, the last will be most nearly straight. Thus :

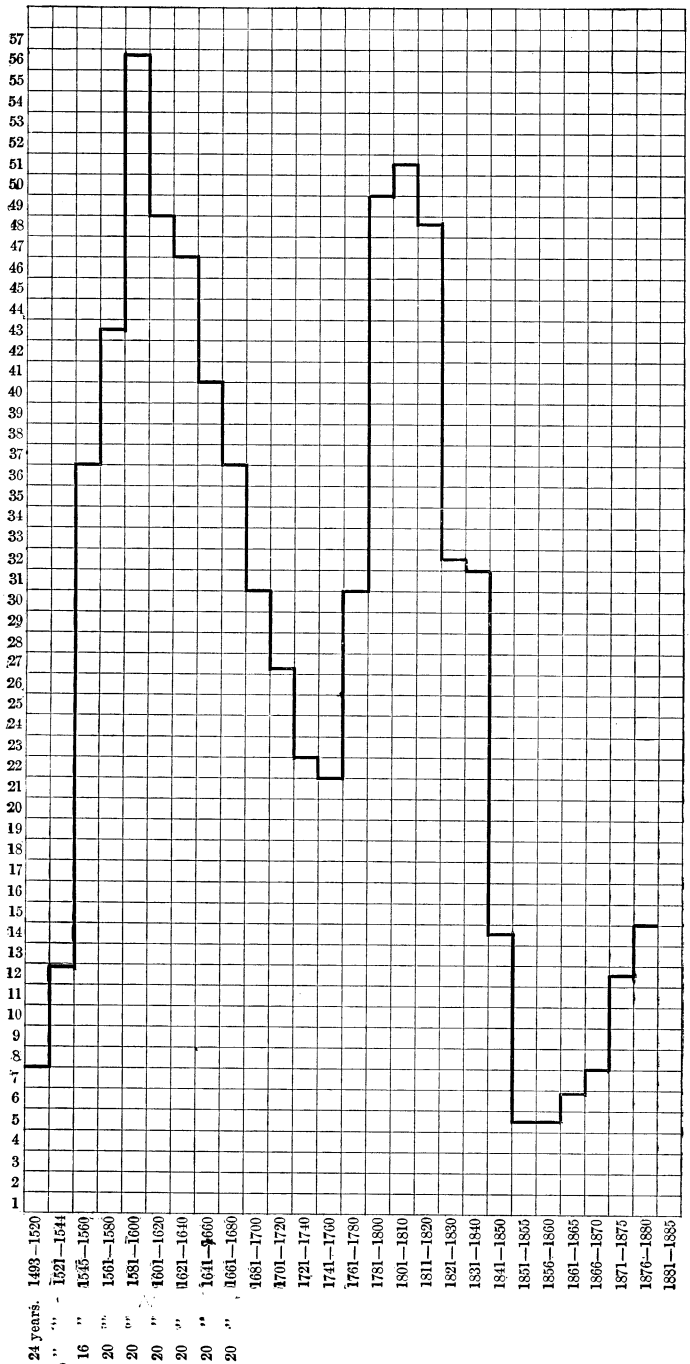


* Prof. Soetbeer in 1878 stated the coin circulation at, gold, 1,500 million marks, and silver, 807 million marks. He both ignored the old silver not called in, and assumed that the ratio of the two coins circulating was correctly indicated by the change in the coinage, whereas much of the new German gold coinage went immediately into France.

So the line of fluctuation in prices influenced by the joint action of both metals must be more uniform than one would be which was influenced by either singly.

Prices of commodities, however, are not influenced solely by their own volume, and those of gold and silver, but also by the volume of credit money which may be put forth, and by the extent to which people may choose to give each other credit, and so substitute faith for value. Thus if A have a house, or merchandise, which he wishes to sell for $10,000 in order to meet a note, when, were it not for the note coming due, he would not sell for less than $12,000, no sooner does a friend offer to cash his note or advance the credit, than his merchandise or house advances from $10,000 to the $12,000 in price. So if silver bullion be selling in London at 46*d.* per ounce, and a purchase of 1,000,000 ounces would shift the market to 47*d.* per ounce, as it probably would, then a loan of $1,000,000 to a person willing to invest in silver would enhance the price of the silver by two cents on the dollar. Thus the price of the precious metals themselves would be gauged, to a degree, by the condition of the credit market. It has been objected, by a few theoretical economists, that the so-called double standard is in their view only an alternative standard—mankind always in fact making an exclusive standard of the money metal which is, for the time being, the cheaper of the two, and virtually relegating the dearer to the rank of a commodity, not only as to its bullion, but its coined value. Upon this point, Baron Alphonse de Rothschild, testifying before the French monetary commission of 1869, said: "Whether gold or silver dominates for the time being, it is always true that the two metals concur together in forming the monetary circulation of the world, and it is the general mass of the two metals combined which serves as the measure of the value of things. In countries with the double standard, the principal circulation will always be established of that metal which is the most abundant." It is also faintly and undecidedly estimated, by Gen. F. A. Walker,* that the process of substitution of the cheaper for the dearer of two metals, in a nation which maintains the double standard, involves some degree of loss, or friction, to the latter nation. Let us see whether this is true. Suppose silver to have fallen in value five per cent. relatively to gold, and France to be the double standard country, while England and Portugal have the single gold stand-

* "Money, Trade, and Industry," p. 178.



Ratio in weight of Silver production to Gold production—on a scale of one (perpendicular) section to the total production of Gold.

ard. As bullion has but one market and one price for the whole world, the fall in silver bullion in London is the same as in Paris. There is, however, in London, silver bullion enough to coin 5,000,000 francs from, and it goes to Paris to be coined. Being coined, it is worth five per cent. more than uncoined, hence it can not be melted up or returned to England. It is an addition to the volume of French currency—not temporarily but permanently. It may be said it releases 5,000,000 francs of gold in France, which will therefore go to England; but wherefore will it? Money does not flow to the points where there is least of it, but to those where there is most of it, *i. e.*, where there is most use for it. The addition of the silver supposed, has a definite tendency toward a rise of prices in France. But wherever prices are rising, money has a new chance of profit. Gold may stay to get this profit. If it is at five per cent. premium in France and at no premium in England, whoever changes the imported silver into the French gold pays the premium in France, and it stays there. France gets it. If, on taking the gold over to England, there is no premium on it there, then the premium is lost to the exporter. If the premium there is the same as it is in France, he has made nothing.

But if France steadily coins all silver that is presented into standard coin, which circulates in France on a level with gold, then silver bullion must inevitably advance to a level with gold bullion. Conceding that the double-standard country parts with a portion of her gold in the process, she makes two profits in doing so, viz., the premium on the gold she sells while silver is below par, and the rise, on the silver she buys, from its depreciated price to par. An *a priori* probability exists, of the intrinsic profitableness of a country acting as a double standard country, and accepting a cheapened currency in exchange for the dearer one, since it always gets the premium on the dearer one, and the profit or rise to par on the cheaper one. There has, heretofore, been no other outcome to the double-standard process, when continued long enough, than that the two money metals return to an equivalent value with each other at some ratio. This theory is confirmed by the fact that France, the most persistent of double-standard countries, has also been the country at all times most abundantly supplied with the coin of both metals.

148. Rate of Production of Gold and Silver.—The accompanying chart, of the rate of production of gold bullion and silver bullion, shows that nature imposes no limit, and exacts no

equality or ratio, in the production of the money metals, gold, however, having been, since 1850, the most unequal of the two. The far greater inequality, in the production of gold than of silver, appears in the fact that, in the twenty-five years from 1851 to 1875, the gold production of the world exceeded the total gold production of the world for the preceding 357 years, making the inequality one of fourteen-fold for a period of twenty-five years. On the other hand, the silver produced in the latter period was only one-fifth that produced in the former, while the time was one-fifteenth, being, therefore, only three-fold the previous rate of production, an inequality only one-fifth as great as pertained to gold. Dr. Soetbeer's estimate on this point is as follows:

	Gold.	Silver.
1493–1850, . . .	$3,314,553,000	$6,741,705,000
1851–1875, . . .	3,317,625,000	1,395,125,000

Upon this basis, Prof. Laughlin* presents the annexed diagram, illustrating the relative rate of production of the two metals by areas during these two periods. The diagram is ingenious. It seems, at first sight, to make out a case of equality in the production of gold, the nature of the equality being between two periods, one of which is 14½ times greater than the other. If the rate of production, per year, over the average of of the two periods, had been made the basis of comparison, gold would have shown a rate 14½ times greater in one period than in the other, and silver a rate 2½ times greater.

Prof. Laughlin, however, computes from Dr. Soetbeer's table of the production of the precious metals, the following figures, showing the comparative rate of production, by weight, of the two metals, viz. :

PERIOD.	Average yearly production of silver in kilogrammes.	Average yearly production of gold in kilogrammes.	Number of times the average yearly production of silver was greater than that of gold.
1493–1520	47,000	5,800	8.1
1521–1544	90,200	7,160	12.6
1545–1560	311,600	8,510	36.6
1561–1580	299,500	6,840	43.7

* "Bimetallism in U. S.," p. 110.

PERIOD.	Average yearly production of silver in kilogrammes.	Average yearly production of gold in kilogrammes.	Number of times the average yearly production of silver was greater than that of gold.
1581–1600	418,900	7,380	56.8
1601–1620	422,900	8,520	49.6
1621–1640	393,600	8,300	47.4
1641–1660	366,300	8,770	41.7
1661–1680	337,000	9,260	36.4
1681–1700	341,900	10,765	31.7
1701–1720	355,600	12,820	27.7
1721–1740	431,200	19,080	22.6
1741–1760	533,145	24,610	21.6
1761–1780	652,740	20,705	31.5
1781–1800	879,060	17,790	49.4
1801–1810	894,150	17,778	50.2
1811–1820	540,770	11,445	47·2
1821–1830	460,560	14,216	32.4
1831–1840	596,450	20,289	29.4
1841–1850	780,415	54,759	14.2
1851–1855	886,115	197,515	4.4
1856–1860	904,990	206,058	4.4
1861–1865	1,101,150	185,123	5.9
1866–1870	1,339,085	191,900	6.9
1871–1875	1,969,425	170,675	11.5
1876–1880	2,500,575	172,325	14.5

To accompany this table, I have constructed a chart, which shows very clearly the ratio of production of the two metals (the unit of measurement being the total gold production of each period, whatever its quantity might be, by weight or quantity and not by value) from the discovery of America to date.

The accompanying charts show the production of gold and silver in different countries, according to value, and in all countries over the period of time from 1492 to 1880. (From Dr. Soetbeer's "Edel. Metal Production," 1879.)

The very considerable difference in quantity between the aggregate of the gold and silver produced, and the portion used in the coinage, expresses the portion used in the arts and as jewelry, and lost by abrasion and wear. Standard gold coin in use loses about $\frac{1}{400}$ part of its weight each year by abrasion.

We are now in possession of most of the facts essential to determine what is called the silver question of 1872, to the present date. The causes of the cheapness of silver for fifteen years past may be divided, as to their relative potency, about as follows:

TENTHS.

1. Increased production of silver, from 1863–73, ... 1
2. Diminished production of gold, and rise in value of gold relative to commodities, ... 1

3. Cessation of the drain of silver to India,	3
4. Attempted change of Germany from silver mono-metallic standard to gold standard,	3
5. Declaration for limited coinage of silver by France and other European States,	1
6. Cessation of free coinage by U. S. in 1873,	1
Total,	10

Of these influences, the latter five-tenths are reversible. Meanwhile, the action of the United States, in refusing to discredit silver altogether, has done something to sustain its value. The disastrous consequences of diminishing the world's money one-half by discrediting silver altogether have been averted. Either Germany, the United States, or France, could probably have brought silver to par with gold by giving it free coinage at any time since 1878. Not having done so, silver will probably remain at a discount until one or more governments concur in giving it a freer coinage, or until an increase in the production of gold relatively to silver, or in the use of silver relatively to gold, either in coinage or in the arts, restores the parity. The relative rate of production of the two metals has no necessary or natural ratio. The rock on which Bimetallism, as a theory, rests, is that the perturbations in value of a currency depending on the production of two metals will be less than in a currency depending on the production of either singly.

The quicksand which has done most to undermine this rock has been the frequent and fallacious citation of what certain partially informed weather-prophets have supposed to be the operation of "Gresham's law." Sir Thomas Gresham stated very truly that if part of the gold or silver coins of a given denomination were adulterated, or made cheaper than the rest, by the extraction of part of their true metal, and the substitution of alloy therefor, the more alloyed coins would, if they succeeded in circulating at par, cause the melting or exportation of the pure. In this sense he taught that "bad money would expel good." But he never taught, as monometalists have so persistently urged, that if the entire bulk of pure bullion of the one metal, whether silver or gold, should fall in value relatively to the other, such a fact would tend to the exportation of the metal of higher bullion value.* As there would be no other country in

* Jevons, in "Money and the Mechanism of Exchange," on p. 72, says: "Gresham's remarks concerning the inability of good money to drive out bad only referred to moneys of one kind of metal."

which the fall would not be the same as in this, obviously, the coin of dearer metal would have no motive to flee to another market, since it could not gain in value by doing so. Yet on this basis, the years since 1878 have lowered with predictions that if if the United States continued to coin silver it would lose its gold. In fact, its stock of gold never increased so rapidly as during the next seven years.

The factor which is more potential, in controlling prices of all commodities, than the supply of either gold or silver is credit. Credit does not have to be mined, assayed, coined, or weighed. In health, no economic factor is more useful. But in its epidemic fevers it becomes a fierce intoxicant. It then becomes a form of social insanity which may bear all before it. At the head of these epidemics of credit stand the Mississippi scheme of 1717 to 1720,* the assignats of the French National Assembly in 1790,† and the silkworm speculations of 1829–30.‡

---

* John Law incorporated his Company of the West in 1717, with a capital of 200,000 shares of 500 livres each, with power to trade in Louisiana. It then comprised the present territory of the United States from the Gulf eastward to Florida and the Atlantic States, northward to the Hudson's Bay Company's grant, and west to the Pacific. It was to have exclusive power to trade, farm the taxes, and coin money, and was to be to two-thirds of the present territory of the United States what the British East India Company was to India. To this, in 1719, it added all the privileges of the French East India Company, with the monopoly of trading in the East Indies, China, and South Seas. Not only the street in which Law lived, but all Paris, was blocked by the hundreds of thousands anxious to get stock in the new concern. Law had been made Director-General of the Finances of France. The "Company of the Indies" merged with the National Bank, and 300,000 persons applied for its shares. Law promised an annual dividend of 200 livres per share, and received in payment the depreciated *billets debat* (state notes), which made the promised dividend virtually 120 per cent. Early in 1720, holders began to convert their shares into gold and secrete the gold. Severe laws were passed against hoarding gold. But in July, 1720, the Bank stopped, the scheme collapsed, and Law fled from France.

† The *assignats* purported to assign to the holder national domain to the value of a certain sum. The land supposed to be assigned were the confiscated estates of the Church, and of the wealthy emigrants who fled to escape the terrors of revolution. The *assignats*, after falling (in 1796) to 1-30th their par value, were redeemed at that rate in *mandats*, which gave the holder the right to take possession of lands at an estimated value, without a sale. These in turn fell to 1-70th their value, in which stage they were gradually re-absorbed by the government in taxes or converted into *rentes*.

‡ See "Silk," in ch. 16, *post*.

CHAPTER X.

CRISES.

149. Crises Defined.—A crisis, panic, or revulsion is a withdrawal of confidence, and a reign of distrust, during which business is brought to a standstill, or to a chaos, by the voluntary refusal of those who are dealing in money or goods, to let them go on the ordinary terms. It *may* be a refusal of the holders of gold or goods to accept bank-notes in payment, whereupon the holders of the notes present them for redemption in quantities larger than the banks can redeem. This is a run of notes for redemption. It arises from a belief in the public mind that more notes have been issued than the banks can redeem. It was one feature of the crisis of 1837, in the United States, when the volume of notes was thirty-nine times in excess of the quantity of specie held for redemption. It had no part in the crises of 1797, 1807–9, 1816 to 19, 1825, 1847, nor 1867 in England, nor in that of 1857 in the United States.

It may be a refusal of depositors to allow their deposits to remain in the custody of the banks, which were previously deemed secure. In such cases they withdraw, either to hoard privately, or to place them in some other bank. Private hoarding is very cumbersome, as a man would need a cart to carry away a very moderate sum. Removal to another bank immediately becomes a void act, if all the banks stand together. A run for deposits assumes that the bank loans have been unwisely made. But it would be necessary that it should not have loaned its money at all, if it is to pay all its deposits without breaking. A bank should be ready to redeem its notes, but solvency does not imply that it can stand a run for all its deposits, without selling out or collecting the securities on which the deposits have been loaned. But to be forced to do this instantly is liquidation, not banking. The crisis of 1857 in the United States was a run for deposits, and was met by all the banks shutting down together. The crisis of 1868 in England was a run on three or four leading banks, and the crisis or "obstruction" consisted in the fact that only the Bank of Eng-

land could issue the additional quantity of bank-notes needed, and it refused to ask permission to do so, on the ground that it did not need them itself. More than one of the twenty leading banks could have drawn a check on the Bank of England, which would have closed its doors, or compelled it to ask permission to issue bank-notes on a deposit of securities, which was all that was required to relieve the other banks. Failing to do so, the business and deposits of the banks which could not obtain the notes, were frightened into the Bank of England, generosity being thus rewarded with bankruptcy and churlishness by profit. The bank gained one-half in its deposits, and made the largest profit ever made by it in one year. There has been no general run on deposits in the United States since 1857.

All the above-mentioned are bank crises, monetary crises, or "money panics." These are a loss of faith by merchants in their banks. Where banks lose faith in merchants, by refusing to discount notes and bills, it is a commercial crisis. This usually winds up a period of several years of ascending prices and quickened speculation, which, if they apply equally to all forms of property, are the exterior signs of a decline in the purchasing power of money, and will generally be traceable to an increase in the volume of money itself, or of some one or other of its many credit substitutes.

In the crisis of 1825–6 in England, prices of all commodities rose from 70 to 100 per cent. within one year, and fell to their former level in the next, besides the whole people engaging in wild investments in South America mines, Insurance bubbles, Mexican projects, Darien Canal companies, etc. Shares would no sooner be put out than they would be eagerly bought up at par and sent whirling up by competing bidders, as if their profits were certain, instead of impossible.

A rise in prices precedes nearly all panics, whether commercial, banking, or financial. Hence it sometimes becomes a question whether the rise in prices has caused the inflation of paper money and credit, or whether the inflation of paper money has caused the rise in prices. In the crisis of 1825-6 in England, three causes concurred to produce the inflation which began in 1821–2, and culminated in four years. These were :

1. The resumption of specie payment in 1820–1, after the business of the country had been running on paper only for nearly thirty years, had the effect to add to the effective currency the whole quantity of gold and siver coin which, during suspension, was

totally out of circulation, concealed, and selling as a commodity at a premium—and therefore exercising very little influence over prices. This great addition of coin to the circulation followed suddenly, at the close of a period which had necessarily been marked by the issue of paper enough to take the place of the coin hoarded during the war. The paper issues themselves, together with the scarcity and high profit of the war period, had maintained a high rate of prices during the period, until the collapse in prices which came with the peace. Low prices, on all home products, concurred with a large increase in the volume of effective money, to stimulate investment in foreign loans. Owing to the increase in the volume of money, something had got to go up in price. Domestic products, and means of subsistence, could not go up, because known to be so abundant. But the distant, the novel, and the unknown can always be made the theme of exaggeration.

2. In 1820 to 1822, the government reduced the rate of interest on consols, and in so doing caused many holders to desire new investments of like kind, in appearance, *i. e.*, of loans. This caused a readiness to invest in that peculiar class of South America loans, and mines, and joint stock companies, which marked the crisis of 1825. A vivid picture of the result is given by Miss Martineau.* The failure of returns from the foreign investments came first. Then a contraction of its accommodations by the bank of England. Then failure, in December, 1825, of about sixty country banks, besides several leading banks of London. Then long lists of factories closed, riots by discharged weavers, who in one day destroyed every power-loom in Blackbourn or within six miles of it. At Carlisle the weavers demanded free corn, and at Trowbridge people insisted that the gardeners and green-grocers were cornering the potatoes. In Dublin the starving silk-weavers demanded that the subscriptions raised for them be applied to clear off the manufacturers' stocks, thus creating a demand so that they might go to work again.†

Economists have not usually applied Gregory King's law of the effect of scarcity and excess of supply of commodities, to money, itself the standard of prices. Evidently, however, as in the case of wheat so in the case of money, a scarcity, or superabundance, would tend to produce a rise, or fall, of prices, in a ratio much

* "History of the Peace," vol i. p. 354.

† Martineau's "History of the Peace," vol. i. p. 367.

greater than the actual scarcity or superabundance. Panics break out in an unexpected manner, without definite prognostication on the part of those supposed to be experts, and run in a rattling thunder of successive failures and downfalls, concerning which many will afterwards say significantly "I knew it," but of which no anterior warning could by the most inquisitive process have been obtained. The financial experts frequently predict crises, and crises frequently occur, but by some singular maladjustment of the prophetic power, or some obstinacy in finance, the crises which are predicted never occur, and those which occur are seldom predicted. Thus Cernuschi came from France, in 1878, to assure Congress that, if it should adopt the act for the limited coinage of silver, its action would immediately result in a monetary crisis, and a drain of gold. The act was adopted, and under its operation the quantity of gold in the country accumulated more rapidly than ever before, and about twice as rapidly as the silver. Yet, occasionally, monetary crises are foretold with a degree of accuracy, through some correct estimate, based upon a sound principle. Thus it appears from Adam Smith's allusion to Mr. Meggins,* that that nearly unknown economist, reasoning that the annual production of silver was twenty times greater than that of gold, but that the drain of silver for India left its supply for Europe only from fifteen to sixteen times greater, inferred that it was the drain of silver to India that maintained the ratio of values between the two metals in Europe at one to fifteen and a half or sixteen ; hence, that if the drain should cease the ratio would fall to that of one to twenty, or one to twenty-two—the ratio of their production. Both Smith and McCulloch combated Meggins' prediction satisfactorily to themselves, but in 1871 the drain from India ceased, and forthwith the value of silver fell exactly as Meggins more than a century previously had predicted , thus producing, at least in part, that monetary crisis in the precious metals which has now prevailed throughout the world for sixteen years. The pretended ability to predict financial crises is often resorted to in practical politics as a means to the accomplishment of immediate results, or to carry an election. Thus in 1872 the chief and most effective cry raised to defeat Mr. Greeley, as a candidate for the Presidency, was that his pressure for an early resumption of specie payments would bring on a financial crisis. General Grant was elected,

* "Wealth of Nations," by McCulloch, p. 97.

and without any such pressure the financial crisis came in 1873, and lasted during his entire term.

In England there were financial or commercial crises of a marked character in 1793 to 1796, 1817 to '19, in 1824 to '26,* in 1836–7, in 1846–7, in 1857, and in 1867. In 1877 there was a widespread derangement of industry, but it did not reach the banks. In the United States there were simultaneous and sympathetic crises in the same years, except in 1827, 1847, and 1866. It is a current saying among experienced merchants, therefore, that in America a crisis is due every twenty years, and in England every ten years. The truth of this saying has been subjected to a recent crucial test by the fact that according to both maxims a crisis was due in both countries during the year just past. In the United States its recurrence at the accustomed period seemed the more probable from the fact that a long-continued process of extinguishment of national debt, which, as we have seen in a previous chapter, is a form of international credit currency, closely affiliated in its effects to paper money, was terminating in an impending extinguishment of the national bank currency through the calling in by the government of the bonds on which the notes of the banks rested, and the enforced retirement of the notes by the banks in consequence. Nevertheless, no crisis came.

150. Crises Produced by Excessive Importation of Competing Products.—The incidents of commercial crises are so much alike, and are told by all writers in so nearly the same terms, that the following description by McCulloch† of the crisis of 1847 in England, which followed the repeal of the duties on the importation of corn in 1846, and the general bankruptcy of the farming interest resulting therefrom, may be taken as a sample and example of all crises. The act of 1844 had provided that no new joint-stock banks should be created, that the banks then existing should be limited to the amount of notes they had issued during the twelve months preceding the passage of that act, and that the Bank of England should issue no new notes except on the deposit of a gold sovereign for every pound note issued. This restriction was suspended to enable the Bank of England to supply, by paper, the money that could not be obtained in coin. It will be seen, in McCulloch's statement, that the "unprecedented im-

* A detailed account of the exterior incidents of the commercial crisis of 1824-6 may be found in Miss Martineau's "History of the Peace." The economic incidents of the periods 1819 to 1837 are analyzed in "Carey's Harmony of Interests."

† Note IX., on Money, to "Smith's Wealth of Nations," by McCulloch, sect. v. p. 507.

portation of foreign food" is the cause of that drain of gold which brings in the crisis. He says: "The crisis of 1847 was a consequence, partly of the railway mania of the previous year, and partly of the failure of the potato crops of 1845 and 1846. The failure in the latter year deprived fully two-thirds of the people of Ireland, and a considerable portion, also, of those of Great Britain, of their accustomed supplies of food. In consequence of this deficiency, and of government having come forward to provide the means for its relief, there was *an unprecedented importation of all sorts of corn;* and the demand for bullion for exportation to meet this importation, occurring simultaneously with a vast railway expenditure, pecuniary accommodations were obtained with the greatest difficulty, and the rate of interest rose to an extraordinary height. Instead, however, of being increased by the Act of 1844, it is abundantly certain that the operation of the latter contributed to alleviate the severity of the crisis. The restraints it imposed on the issues of the country banks had hindered them from embarking to any great extent in railway adventures, so that they were better able to assist their customers ; and it also prevented the Bank of England from attempting to meet the exigencies of the case, otherwise than by raising the rate of interest, and restricting her issues. And besides being the natural and proper, these were, in fact, the only means by which the value of bullion could be raised in this country, its demand for foreign remittance checked, and the exchange turned in our favor. A great many mercantile houses that had been trading upon very insufficient capitals, or which had previously been virtually insolvent, were, of course, swept off during the crisis ; and the alarm that was thereby occasioned, though for the most part without any good foundation, gave rise to a species of panic. During the prevalence of the latter, government consented (25th October, 1847) to a temporary suspension of the Act of 1844. But there is, we believe, little doubt that this was an unwise proceeding. When it took place the violence of the crisis had abated. The drain for gold for exportation had not only ceased, but it had begun to set in our favor ; and the probability is that in a few days all alarm would have passed off, without the dangerous precedent which was set by the interference of ministers."

The repeal of the corn laws had not made corn cheaper to the people of England in any material degree, if at all. It had changed the source of supply from Ireland, Scotland, and England to foreign countries. The "Encyclopedia Britannica" says,

"The production of wheat in Scotland and Ireland fell off one-half," and "in the seven years ending Christmas, 1846, the prices of wheat and its substitutes per bushel had been: Wheat, 7s. ½d.; barley, 4s.; oats, 2s. 8½d.; total, 13s. 9d.; while the prices for the seven years ending 1875 were: Wheat, 6s. 6¾d.; barley, 4s. 10d.; oats, 3s. 2½d.; total, 14s. 7¼d." The free importation of foreign corn did not permanently reduce the price of corn, but substituted the foreign for the domestic supply. The domestic production declined one-half, in Ireland and Scotland, to make room for the increased importation of foreign food. The drain of gold required to pay for this increased importation caused the financial and commercial crisis of 1847 in England, at a time when there was no financial crisis in any other country. Hence has resulted two syllogisms, which are alike as to their major and minor premise, but differ only as to the conclusion. They may be called the corn law syllogisms, and run thus:

Major Premise.—The free importation from abroad, of products which a country has the natural facilities for producing, or has produced or can conveniently produce, does not cheapen permanently or substantially the supply of the product, but displaces the domestic by the foreign product, thus tending toward a disruption of domestic industries, a drain of gold, a run on the banks, and a financial crisis.

Minor Premise.—England attempted, in 1846, to get cheap breadstuffs by withdrawing protective duties from her farmers and accepting free importation from abroad, and in so doing she got no cheaper breadstuffs and no more of them, but caused a cessation in her domestic production, exactly equal to her importation, thus resulting in a disruption of her industries, a drain of gold, a run on the banks, and a commercial crisis.

Conclusion, among distant economists, that the repeal of the corn laws caused the crisis of 1847.

Conclusion, among English economists, that the crisis of 1847 was due to causes unknown.

151. Competing Imports Again the Cause.—In treating the crisis of 1857 in England, the same English economist, Mr. McCulloch, fully agrees with our American economists, and with the American people generally, in holding that it was caused in England as a reflex effect of general bankruptcy in the United States, and that it was caused in the United States by buying of England goods which competed with and displaced our own products, and which we had no means to pay for, and ought not to

have bought. The deftness with which Mr. McCulloch admits all the facts, while endeavoring to conceal their economic inference, leads us to quote also his statement of the crisis of 1857. He says:* "The circumstances that led to the suspension of the Act of 1844, in 1857, were somewhat similar. The real value of our exports to the United States in 1856 amounted to 21,476,000*l.*, and, in addition to this immense sum, a large additional amount was due to this country, on account of dividends on state, railway, canal, and other stocks, etc. Unluckily, however, all, or nearly all, the American banks stopped payments in 1856 and 1857; and the losses that were thus occasioned, coupled with the consequent reduction and cessation of remittances, produced much distress among great numbers of the merchants and others engaged in the American trade. And it was among them, or those immediately connected with that trade, that the greatest overtrading and abuse of credit had taken place. Some firms in Glasgow, which had been notoriously overtrading for a number of years, were the first to give way; and, their failure being on a very large scale, the banks by which they had been principally supported became the objects of suspicion, and from suspicion to distrust there is but a step. Notwithstanding the numbers and wealth of the shareholders responsible for the banks in question, they were subjected to a run on the part of the inferior class of note-holders and depositors, and, their resources being either anticipated or locked up, they were obliged to suspend payments. And had they only failed none could have regretted the result. On the contrary, it would have been nothing more than they deserved, for they had for a lengthened period grossly abused the ample resources at their command, and resorted to the most questionable means to bolster up the speculators with whom they had become identified; but the mischief is that the disastrous effects of such proceedings can not be confined to the guilty parties. A fire originating in a pig-sty may destroy a palace. The suspension of the offending banks, by generating uneasy feelings and suspicions in the public mind, led to a run on some of the other banks. And to provide for their own safety, these establishments immediately began to sell securities and to adopt other means by which to obtain supplies of gold. Large amounts of it were in consequence carried to Scotland. And, in addition to the demand for gold, the demand for discounts, notwithstanding the high rate

* "Wealth of Nations," etc., p. 507.

of ten per cent. charged by the bank, continued undiminished, so that the reserve in her possession was reduced on the 11th of November to 1,462,153*l.*; and it was the general belief that this inadequate reserve would be forthwith either much reduced or wholly swallowed up. To avert the possibility of such an event occurring, the directors were authorized, on the 12th of November, to issue notes without being bound by the conditions of the Act of 1844. This, though a brief, is a sufficiently accurate account of the leading circumstances that occasioned the suspension of the Act in 1857."

Victories and reverses attend all forms of warfare. The competitions among the producers of populous nations, in the production of the same products, are a state of economic war, and are attended by some of the wastes of war. These are shown to be a leading factor in causing commercial crises.

152. Exhaustion of Capital.—Crises are also, by some, attributed to the exhaustion of capital in great public improvements, and in great wars, or in mines, ships, factories, or other forms of reproductive wealth, that do not at first produce a profitable return. Prof. Bonamy Price has pressed this theory strenuously. He says: "The causes which make the receipts of bankers dwindle away are in the main two—first, a diminution of the sale of goods, such as occurs when trade is bad, and stocks of merchandise accumulate for want of purchasers, or when the harvest is deficient, or when cotton is scarce and dear, and the consumers of cotton goods reduce their consumption; and, secondly, a diminution of profits, leaving small margin for savings, and reducing the quantity of uninvested savings, which form a large portion of the means at the disposal of bankers. These two causes may be summed up in one—loss of wealth, whether positively, by its actual destruction, or negatively, by a failure in its ordinary rate of accumulation. Here I must point out a mode of impoverishing a nation for a time, which is little heeded in the city, though it tells most powerfully on the resources of bankers. Most persons are satisfied if an undertaking is sound in character—if it is no bubble, but a solid investment. They make no further inquiry; they press it forward, and preach to bankers that they are safe, and even patriotic, in promoting such enterprises. Such are works of drainage, railways, docks, canals, and the like. No doubt they are all highly promotive of wealth. The growth of a nation in well-being and greatness largely turns on the prosecution of such works. But no one stops to reflect

that such operations destroy wealth and diminish resources, until they are capable of yielding profitable returns. Nothing enriches a country like a well-planned railway; yet railways are nothing but a gigantic destruction of wealth till they are at work. They employ an enormous mass of labor; they use up huge quantities of iron and other materials which have been produced by the consumption of wealth. Hosts of laborers have been fed and clothed during their construction; tools have been worn out; materials have been used up. And what has been the result? A change in the surface of the land. No one doubts that, if the laborers employed in making the railway had been set to dig holes in the ground and fill them up again, a flood of poverty would have overspread the country. The food of the laborers would have been lost and not replaced. In what respect, for the time, do the embankments and tunnels of a railway differ from such holes? In the future they may and will generate vast wealth—for the present, they are a pure and uncompensated loss of the public wealth. Nations ought to make railways; they will be far richer by making railways; and bankers, in days to come, will have much more to lend to borrowers. But, if nations are not to feel impoverishment during their construction, they must be made out of savings, that is, out of the food, clothing, and materials produced in the country in excess of the quantity consumed.

"New enterprises there ought to be and will be in a growing nation; but they should be limited by its means, that is, by its savings. It is a most momentous question to determine what these savings are, as a matter of fact, and unfortunately it is a most difficult one. It is always very hard to say how much drainage, how many railways and openings of mines and new factories England can afford to make, and an estimate of its amount is necessarily vague. Still, the signs of excess become sufficiently prominent to enable a watchful eye to detect them."

Reduced to a nut-shell, Prof. Price's theory would be that a sufficient lapse of time between the investment of circulating capital (money) in the creation of fixed capital (reproductive wealth) and the reaping therefrom of a satisfactory income, might bring on a financial, monetary, or commercial crisis. This remains a mere *priori* speculation, however, until it shall be connected with such facts, in a specific instance, as satisfy the mind that a crisis was produced by lapse of time between investment and the returns from reproductive capital.

153. Great Wars Seldom if Ever Produce but Often Avert or Remedy Crises.—Great wars are sometimes assumed to be fitting causes to which to attribute commercial crises. They involve, however, a double action. They exhaust resources, but if these resources happen to be a glut of unsalable products, this exhaustion by removing the glut sets the wheels in motion, having the effect of a wider market or an increased consumption. They call for large expenditures of money, but they frequently manufacture most of the money they call for, and by adding to the volume of paper money they raise prices and induce that feeling of profit and success in all occupations which stimulates effort. They also, by endangering the accumulations of the rich, render them generous in giving part to save the whole. They stimulate the feeling of mutual dependence and reciprocal sacrifice in both poor and rich, terminating for the time the parsimony of the latter and the discontent of the former, and welding society into a more highly organized unity. All these influences increase the activity of the societary movement and the rate of production.

Hence many nations have made their most rapid advancement, and the rise from poverty to wealth has been most easy, during or immediately after great wars. In the Northern States, during their war with the Confederacy, the bounties offered by Federal, State and municipal authorities on enlistment rose to from $1,000 to $1,500 per man, thus making manhood more valuable relatively to capital. Long periods of peace, however, tighten the ascendency of capital over labor, and it is doubtful if they do not increase the timidity of capital in embarking in new enterprises. The period from 1805 to 1816, both in the United States and England, was a period, the first part of which represented partial or total embargoes on foreign trade, and the last years of which were war. Yet these were years of great prosperity to the common people, while the ten years of peace and free intercourse, immediately following, were years of destitution in both countries. Wheat in the United States for the five years, 1810 to 1815, held an average price in the United States of $11.60 per barrel, while in the ten years after the war it was from $4 to $1.25 per barrel, or twenty cents per bushel. At Pittsburg a ton of bar iron cost eighty barrels of flour. The cotton manufacture had increased ninety-fold under non-intercourse. Instead of absorbing 1,000 bales it absorbed 90,000.

The intimate relation between the high prices for products, that are incident to periods of war, and the prosperity of the working and business classes, may be seen by noting the rise in the prices

of different commodities shown by the accompanying chart prepared by Prof. Jevons for England, with modifications by Prof. Laughlin. It applies equally to the United States as to the first war period, and far better as to the period from 1860 to 1866, since as to the latter the chart expresses a rise in England which was only sympathetic with the far greater rise in the United States.

In the United States, in 1816, the vast importations caused by the sudden removal of the discriminating duties which had prevailed since 1790, caused an immense cessation in domestic production. Young as our industries, and sparse as our population, then were, 70,000 operatives were discharged in a single year, and driven into idleness or agriculture.

Although in theory the world was open to our products, while during the war it had been closed against them by the Berlin and Milan decrees and the English and French navies, yet in fact the breaking down of our manufactures so impaired the prices of agricultural products that crops would hardly pay for marketing, and the cost of producing them was a net loss.

The return of peace caused so great a prostration of manufactures and agriculture, partly because the commercial treaty of 1816, though designed to be protective, provided no adequate protection to the industries that had been called into existence by the war. Our imports rose from about $20,000,000 in 1814 to about $150,000,000 in 1815. American workmen had the benefit of cheap markets for a few months, and, in return, were turned out of employment for many months. Instead of buying the farmers' crops, they went to raising them as long as there was a hope of a market, and, when that stopped agricultural industry was as prostrate as manufactures. England could sell us our hardware, clothing, tools, furniture, and many of our groceries ; but she could not buy our hay, potatoes, oats, very little of our corn, and none if European crops were abundant, nor any of our timber, butter, eggs, cheese, milk, or lard, very little of our meats ; and she could not hire our workmen, or employ our labor, or use our idle factories, furnaces, mines, or machinery. In 1818–19 there came upon the country the severest commercial crisis it had ever known—the result of three years of that kind of diminution of domestic production which results from freer importation of foreign competing goods.

In review of this period, 1819 to 1824, Andrew Jackson, then a candidate for the Presidency, wrote to Dr. Coleman these words :

"I will ask what is the real situation of the agriculturist ?

Where has the American farmer a market for his surplus product? Except for cotton, he has neither a foreign nor home market. Does not this clearly prove, where there is no market either at home or abroad, that there is too much labor employed in agriculture, and that the channels for labor should be multiplied? Common sense points out the remedy. Draw from agriculture the superabundant labor. Employ it in mechanism and manufactures, thereby creating a home market for your bread-stuffs, and distributing labor to the most profitable account, and benefits will ensue to the country. Take from agriculture in the United States six hundred thousand men, women, and children, and you will at once give a home market for more bread-stuffs than all Europe now furnish us a market for. In short, we have been too long subject to the policy of British merchants. It is time that we shall become a little more Americanized, and, instead of feeding the paupers and laborers of Europe, feed our own; or else, in a short time, by continuing our present policy, we shall be paupers ourselves."

154. The American Crisis of 1837.—The crisis of 1837 is generally known as a bank or monetary crisis, due immediately to excessive inflation of prices, by large issues of paper money by banks.

It manifested itself in a general suspension, by banks, of specie redemption on their notes, and inability to pay deposits in acceptable bills. Among merchants, farmers, and business men of every class, there was no money of any value, and trade returned largely to trust, barter, or no trade at all. This inflation in paper money, however, was itself an effect of anterior causes, and rightly to apprehend these it is necessary to begin with the year 1824.

In 1824, after ten years of peace, stagnation in trade, and agitation of the question of protection to American industries, a protective tariff was enacted, and in 1828 its rates were increased.*

* The changes made in the tariff as indicated below are a fair exhibit of the multiplicity of objects on which a protective tariff must rest, in order to do justice to all and be invidious towards none in a country which possesses all the natural facilities for producing nearly every thing, and where the object of the duty is to cause the artificial facilities, capital, machinery, etc., to be applied.

Adzes and axes, free from 1816 to 1828, were subjected to an import duty of 35 per cent.

Ale, porter, and beer paying, 15 cents per gallon from 1816, were put up to 20 cents.

Anvils, free from 1816, paid 2 cents per pound from 1824.

Arms, paying 20 per cent. in 1816, paid 30 per cent. from 1824.

Bacon and hams, at first free, paid 3 cents per pound.

Beef, at first free, paid 2 cents per pound.

The effects of the tariff of 1824–28 were to stop, and reverse, the export of gold and silver, with which we had previously been paying for our excess of imported merchandise over exported products. Having bought more than we could pay for, with our products, we were in the position of a farmer who is compelled to part with his implements, in lieu of his products, in order to pay his debts. The fact that gold and silver were then, in some small degree, a product of our mining, did not lessen their far greater importance as the implement of our domestic commerce.

From 1821 to 1825, according to H. C. Carey,* the excess of exports over imports of specie were $12,500,000 per year, besides which we were using up in the arts as much more of gold and

---

Blacksmiths' hammers and sledges, free from 1816, were made to pay 2½ cents per pound from 1824.

Blankets of wool, free from 1816, were placed in 1824 under a duty of 25 per cent., which was increased in 1828 to 35 per cent.

Bonnets of silk remained at 30 per cent. as in 1816, but those of straw, palm leaf, leghorn, and chip were raised in 1824 to 50 per cent.

Books, for schools, colleges, and the Congress library were left free, but those in Latin and Greek were in 1824 put up to 15 cents per pound, and all others to 26 cents bound and 30 cents per pound unbound.

Boots and shoes, both men's and women's, remained as in 1816, under a duty of $1.50 per pair.

Brass and its manufactures were raised from a duty of 20 per cent. to one of 25 per cent.

Butter, in 1816 free, paid from 1824 5 cents per pound.

Carpets, in 1816 free, passed under a duty in 1824 of from 20 to 50 cents per square yard, which was increased in 1838 to from 30 cents to 70 cents per square yard. Carriages continued at 30 per cent., cheese at 9 cents per pound, china-ware at 20 per cent., and cinnamon and cloves at 25 cents per pound, cocoa at 2 cents, and coffee at 5 cents per pound.

Raw cotton remained at 3 cents per pound, while cotton bagging, which had been free in 1816, was put under a duty of 3¾ cents, in 1824 increased to 4½, and 5 cents in 1828. Cutlery had been from 1816 under a duty of 20 per cent. to 25 per cent., and on cutting knives 30 per cent., which was increased in 1828 to 40 per cent.

Drugs for dyeing were advanced from a duty of 7½ to one of 12½ per cent. Russia duck, Ravens, and Holland were advanced from a duty of $1.25 to $2.50 a piece to one of 9 cents per square yard.

Flannels, free in 1816, were raised to 30 per cent.

Raw flax in 1828 was dutied $35 to $60 per ton.

Duties on glass were raised according to quality.

Raw hemp was put up from $1.50 per cwt. to $45 and $60 per ton. Hosiery in 1828 was made to pay 35 per cent. Iron was scheduled in twenty-three forms, of which bar iron, which had paid $1 50 per cwt. from 1816, was raised in 1828 to $37 per ton. Laces and jewelry were put up from a duty of 7½ per cent. to one of 12½ per cent. Pig lead was put up from 1 cent per pound to 3 cents. Paper was taken from a 30 per cent. *ad valorem* duty and placed under a series of specific duties ranging at from 3 cents to 20 cents per pound. Brown and white sheetings remained unchanged at $1.60 per piece for brown and $2.50 for white. In all, 821 articles were classified as paying duty.

* "Social Science," condensed by McKean, pp. 292–5.

silver coined or uncoined, being a total subtraction from circulation of the chief instrument of commerce of $25,000,000 a year. Nor was there any production of precious metals, in the United States, prior to 1850, or coinage at the mint, adequate to supply this drain. Frem 1790 to 1852, the mint only coined $2,506,890 in silver dollars in all the seventy-two years, and only about twice that sum in quarter-eagles. From 1811 to 1834 we coined no gold, and from 1823 to 1834 no standard coins of silver. Being virtually dependent on imported Spanish and Mexican coins for our specie money, a drain of specie such as that which ensued from 1817 to 1824 left us without trustworthy money, and dependent wholly on the paper issues of the banks.

By the tariff of 1824 the drain of gold was so far reversed that the following four years witnessed the small total, net excess of import over export, of $4,000,000. The ensuing years from 1830 to 1834 show an active growth of manufactures, an excess of import over export of the precious metals of $4,000,000 a year, an extinguishment of the national debt, and an agitation of the question of dividing the surplus moneys in the Treasury of the United States among the States, which did not, however, become a law until 1836, when the epoch of general bankruptcy was approaching.

By 1832–3, however, a tide of agitation against the tariff of 1828 rose, in South Carolina, into threats of secession. Mr. Clay proposed, and President Jackson sanctioned, as a compromise, a sliding scale of reduction, which went into effect March 3, 1833. The effect was greatly to increase the importations of competing goods in many lines, which, under the protection of 1828–30, the country had begun to produce with energy. The period of 1828 to 1830 had been marked by the introduction in the legislatures of Virginia and Kentucky, for the first and last time, of a proposal to emancipate the African slaves, whose average value was then about $250 per head. The belief was then gaining ground that emancipation would gradually reach the South, in the same easy manner as it had triumphed in the Northern States. The same expansion of the cotton crop, in the Southern States, which incited South Carolina to oppose protection to the cotton manufacture in the United States, also caused a rapid rise in the price of slaves to $1,000 and $2,000. This put a quietus on all projects looking toward emancipation. Meanwhile, imports of merchandise, which had been $67,000,000 in 1829, and $62,000,000 in 1830, rose to 101 millions in 1833, 108 millions in 1834, 101 millions in

1835, and 106 millions in 1836, resulting in an excess of imports over exports of $112,000,000 in the three years 1835, 1836, and 1837.

These large importations of foreign goods, sent to our auction rooms by importers and traders, were sold at low rates, if for cash, and on long credits, if for time. The notes given for them swelled the volume of commercial paper seeking discount, and the large "shave," or rates of discount paid, increased the profits of banking, and the temptation to found new banks for the issue of paper money on very flimsy securities. With the proceeds of these notes, new goods were bought abroad, and, with the inflation in the volume of paper money, prices of lands, as well as of goods, rose on every hand. Hence most, if not all, the causes operating to produce the crisis of 1837 begin their operation with the repeal in 1833 of the protective system of 1828, and the destruction of domestic industries by the large influx of competing goods. To these are to be added the feverish nature of the prosperity imparted to the South by the rapid expansion in its cotton, sugar, and tobacco industries, under the stimulus of cheap African labor, and the great expectations felt in the North, under the stimulus imparted by the discovery that steam transportation was about to make the vast and fertile territory, to the north and west of the Ohio, easily accessible to the markets of Europe.

155. Crisis of 1857.—Commercial crises have in some instances been immediately preceded, and possibly in part produced or heightened, by the increase in the volume of the precious metals, through them of credits, and finally of importations.

The crisis of 1857 in the United States followed upon an expansion of credits, which reached its climax in the years 1851 and 1852, and which by the winter of 1853 had collapsed into a period of commercial stagnation known as the "hard times" of 1853–4, which continued growing more severe, until the bank crisis of 1857. Industries generally met with no relief until the revival of business in 1862 and 1863. This entire period seemed to have for its two exciting causes the heavy importations of competing English goods induced by the low duties adopted in 1846, and the vast expansion of credits incident to the additions made by the gold mines of California and Australia to the world's supply of specie. The total gold coinage of the United States from 1792 to 1849 had been only $85,588,038.

That of Great Britain from 1816 to 1851 had been only $480,-105,755. That of France from 1793 to 1851 had been only $314,-

491,516. In the fifteen years, from 1851 to 1866, there was coined of gold a sum equal,

In Great Britain, to, ...	$455,233,695
In France, to, ...	987,728,298
And in the United States, to	665,352,323
Total, ...	$2,108,314,316

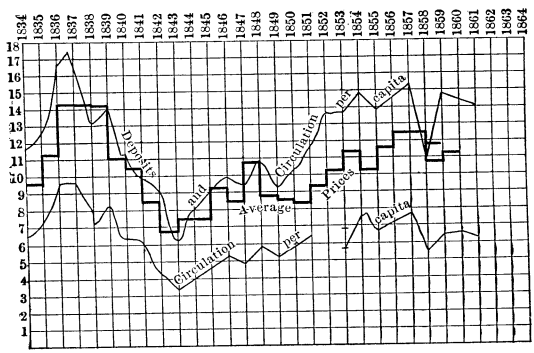
At first it would seem that this enormous addition to the money supply ought to have made money abundant, and business of all kinds prosperous, in the United States, instead of producing stringency as early as 1853–4, continuing for the next seven years. In the winter of 1853–4 processions of the unemployed paraded New York. Soup-houses, for the gratuitous feeding of the starving poor, were opened in all parts of the city, as well as in the other cities of the Atlantic coast; manufactures and agriculture were in a state of prolonged prostration, and at the outbreak of the war of the rebellion in 1861, as well as during most of the preceding seven years, there was neither gold nor silver anywhere to be had. Secretary Chase computed the total amount of both metals in the country, at the outbreak of the rebellion, at not to exceed $50,000,000. The quantity coined had never gone into use, in the United States, except as a basis of redemption for bank-notes, and through these had inflated bank discounts, deposits, and prices. Bearing in mind that the two years of financial crisis were 1837 and 1857, and that the premonitory symptoms of these two crises were an inflation in the circulation of bank-notes, and in the bank deposits and discounts, the relation between this cause and its effects will be plainly seen in the following table, prepared by the Secretary of the Treasury in his report for 1863: *

On or near January 1.	*Circulation.*	*Deposits.*	*Specie.*	*Deposits and circulation per capita.*	*Circulation per capita.*
1834	$94,840,000	$75,677,000	———	$11.83	$6.58
1835	103,692,000	83,081,000	$43,937,000	12.61	7.00
1836	140,301,000	115,104,000	40,019,000	16.77	9.15
1837	149,186,000	127,397,000	37,915,000	17.66	9.52
1838	116,139,000	84,691,000	35,184,000	12.46	7.21
1839	135,171,000	90,240,000	45,132,000	13.59	8.15
1840	107,000,000	75,696,000	33,105,000	10.70	6.26
1841	107,290,000	64,890,000	34,813,000	9.79	6.10
1842	83,734,000	62,408,000	28,440,000	8.07	4.62

* With an addendum of the last column showing circulation per capita, by Mr. Weston, "Money," p. 195.

On or near January 1.	*Circulation.*	*Deposits.*	*Specie.*	*Deposits and circulation per capita.*	*Circulation per capita.*
1843	58,564,000	56.168,000	33,000,000	6.15	3.14
1844	75,168,000	84,550,000	49.898,000	8.31	3.91
1845	89.608,000	88,021,000	44,241,000	8.96	4.52
1846	105,552,000	96,913,000	42,012,000	9.90	5.11
1847	105,500,000	91,812,000	35,132,000	9.35	5.00
1848	128,506,000	103,227,000	46,300,000	10.65	5.90
1849	114,740,000	91,182,000	43,620,000	9.17	5.11
1850	131,367,000	109,586,000	45,380,000	10.39	5.66
1851	155,165,000	128,957,000	48,670,000	11.87	6.48
1852	———	———	———	13.31	———
1853	146,072,000	145,553,000	47,338 000	13.66	5.71
1854	204,689,000	188,188,000	59,410,000	14.97	7.80
1855	187,000,000	190,400,000	53.944,000	13.95	6.92
1856	195,747,000	212,706,000	59,314,000	14.66	7.03
1857	214,779,000	230,351,000	58,300,000	15.52	7.48
1858	155,208,000	185,932,000	74,412,000	11.56	5.26
1859	193,307,000	259,568,000	104,537,000	14.91	6.37
1860	207,102,000	253,802,000	83,594,000	14.66	6.59
1861	202,005,000	257,229,000	87,674,000	14.13	6.21

In the same Treasury Report for 1863 are tables of the average wholesale prices, in the New York market, of ten articles (coffee, leather, molasses, mess pork, cheese, rice, salt, sugar, tobacco, and wool), from 1834 to 1859, both inclusive. The following tables, also prepared, in part, by the Treasury Department, and in part by Mr. Weston,* show how closely an expansion in the volume of the circulation must be attended by an expansion in prices of commodities, and how the culmination of the two marks a financial crisis.



RISE AND FALL IN VOLUME OF CURRENCY IN CRISES OF 1837 AND 1857, ATTENDED BY LIKE RISE AND FALL IN PRICES OF TEN COMMODITIES.

* Weston "On Money," p. 201.

Year.	Average of prices.	Circulation per capita, January 1.	Year.	Average of prices.	Circulation per capita. January 1.
1834	$19.13¾	$6.58	1847	$20.82¼	$5.00
1835	22.81½	7.00	1848	16.53½	5.90
1836	29.46½	9.15	1849	16.45	5.11
1837	28.40½	9.52	1850	16.20½	5.66
1838	28.35¾	7.21	1851	19.42½	6.48
1839	22.21¾	8.15	1852	21.42½	No returns.
1840	20.73¼	6.26	1853	22.47¾	5.71
1841	17.93¾	6.10	1854	20.84	7.80
1842	13.80¼	4.62	1855	22.78¾	6.92
1843	14.82½	3.14	1856	25.07½	7.03
1844	14.65½	3.91	1857	25.13½	7.48
1845	18.56½	4.52	1858	21.92	5.26
1846	16.69	5.11	1859	22.11½	6.37

While the expansion in the volume of specie and credits, in England and in Europe, in 1851-7, was as great as in the United States, the collapse of credit in England was less severe than in the United States. Indeed, the prevailing view, among American protectionists, is that the crisis was due in 1850-1 owing to the great advantages given to foreign over domestic competing productions by the low "Tariff for Revenue only" adopted under the lead of Robert J. Walker, in 1846. Under the operation of this "Free Trade Tariff," there was an excess of imports of merchandise over exports, and an export of gold and silver to pay for them, as follows :

Year ending June 30th.	Excess of Imports over Exports, Merchandise.	Excess of Exports over Imports of Gold and Silver.
1848	$10,448,129	$ 9,481,332
1849	855,027	
1850	29,133,800	2,894,202
1851	21,856,170	24,019,249
1852	40,456,167	37,169,091
1853	60,287,983	23,285,493
1854	60,663,479	34,342,162
1855	38,899,205	52,587,531
1856	29,212,887	41,537,853
1857	54,604,582 (Excess of importation of commodities.)	56,675,123
1858	8,672,620	33,358,651
1859	38,431,290	56,675,123
1860	20,040,062	33,358,651
1861	69,756,709	56,452,622

The great outflow of specie was made possible by the influx of new gold from California and Australia. But happening to occur so soon after the tariff of '46, it deferred until 1857 a crisis due in 1851–2.

156. The Crisis of 1866. — Tooke and Miss Martineau, as historians of the panic of 1825, agree that the Bank of England's liberality in discounting bills stimulated the inflation which preceded the panic.

In that of 1865, Mr. R. H. Patterson * is equally sure that the Bank of England virtually created the panic for its own profit, as well as reaped an enormous profit from it. The Act of 1844 authorizes the Bank of England to raise its rates of interest, at discretion, when there is a scarcity of money, and in suspending that act it empowers the bank to issue notes in excess of the statutory limit, but does not oblige it to do so, and neither authorizes the other banks to issue notes nor to demand their issue by the Bank of England. That bank, though performing public functions, is still a private bank, and not a government bank, so far as the profit on its capital is concerned.

The great fall in values and prices, which attended the close of the American war, had converted an extended line of securities, on which certain banking houses had loaned, into doubtful stocks. A feeling of distrust set in, relative to these houses, and the Bank of England, in the first week of October, raised its rate of discount from four and a half to seven per cent. The banking house of Overend, Gurney & Co. had held from twelve millions to eighteen millions pounds sterling of deposits. A slow but persistent run on these had obliged it, at last, to ask assistance from the Bank of England on other than valid commercial securities. The aid was refused. The firm failed, and the result showed it to be entirely rotten. One or two other banks failed in consequence. As the entire deposits of the kingdom, in all its banks, were £400,000,000, and the amount of banking currency was only £40,000,000, of which only half was available for paying them, the remaining £20,000,000 would have to circulate very nimbly to suffice for the payment of twenty times its sum in deposits.

Most of the depositors who withdrew from the other banks would transfer their deposits to the Bank of England. If the other banks suspended, the law transferred their deposits to the Bank of England, as custodian, until they were out of bankruptcy or chancery. Every failure of the other banks only added to the deposits, the coin, the discounts, and the business of the Bank of England. Hence, when the government, to arrest the panic, authorized the Bank to extend its issues, it chose to regard this as a privilege to itself, and not as a means of relief to the other

* "Science of Finance," p. 231.

banks. The profits of the bank rose to £975,655 for the half-year, of which £679,000 were earned during the fourteen weeks when its rate of discount was ten per cent. All this because the law enabled the Bank of England to issue all the notes it chose, to banks or merchants who applied to it as its own customers, but did not compel it to issue any notes whatever to banks which desired them for their own relief, and that of their depositors. The bank was thus enabled to break a number of the other banks which, until the act was suspended, could have broken the Bank of England by simply checking for their entire deposit.*

157. The Crisis of 1873-9. — The revulsion of 1873 in the United States is sometimes spoken of as a crisis, but it differs widely from any we have been considering, in the fact that it neither brought panic to the banks, nor bankruptcy to the merchants or manufacturers on any serious scale. It brought only a period of falling prices, extending over all sorts of commodities and continuing almost uninterruptedly for seven years, with the effect of checking production and causing apprehension and great caution, with frequent closing of large factories and workshops, some suffering, and much agitation among wage-workers, followed by the formation of the most extensive and closely bound labor organizations, some of them numbering their members by hundreds of thousands, and commanding large treasuries, with able officers, to whom were paid good salaries. In one sense, the fourteen years following 1873 have been a continued labor crisis, meaning thereby, not a period of starvation, or suffering, or extended failure of employment, but rather of just enough closeness in business, and meagerness in pay, to keep working-men dissatisfied, while profits in many lines of industry seemed hardly to justify employers in keeping their establishments running.

The causes were national, and grew out of a large contraction in the volume of transferable credits, occasioned partly by the policy of rapidly paying off the principal of the United States war debt, and partly by the fall in the value of silver relatively to gold, which set in in 1873, and culminated in the spring of 1876.

The war for the suppression of attempted secession, in 1861 to 1865, was fought out to its close with American capital. European bondholders, in the spring of 1865, had not been induced to lend the United States more than one-thirtieth as much as the Government had borrowed from its own people.

* "Science of Finance," by R. H. Patterson, p. 223-247.

With the advent of peace, a lively European demand set in. The bonds were exported, at the rate of from two to three hundred millions worth per year, until 1872. Dr. Edward Young estimates that in 1873-6 from twelve hundred to one thousand three hundred and fifty millions of dollars' worth had gone abroad, and the portion held at home was narrowing down to the quantity needed by the national banks, as the basis of their note circulation. While these bonds were going abroad our balance of trade with Europe appeared as if heavily adverse to us, the fact being that our export of bonds was paying for our import of goods. Internationally, the bonds performed, for the time being, the function which gold, or other products, would have performed. They added to the buying capacity of the American people, to the extent of their face, and hence deferred the real period of payment of the very debt they represented. As between America and Europe, it was the incurment of a new loan, by the people of the latter to the people of the former, *pari passu* with the export of bonds.

In 1873, the supply of bonds was exhausted. The borrowing resource, which had made the American people appear so flush of money, for the eight years following so exhausting a war, was ended. It was now necessary to greatly restrict importation, and to pay for what we got, year by year, in goods or gold. So long as money was flush we could keep on building railways for the profit of contractors, though the prospect of paying returns from them might be ten years ahead. We had many enterprises like this on hand, but the least needed of them all was Jay Cooke's Northern Pacific scheme. The crisis opened with the failure of Jay Cooke & Co., and collapse of the Northern Pacific, and continued in a shaking out of value from what were called "watered railway stocks." Many of the railways were closely identified with the iron and steel manufacture, which had a chief hand in supplying their tracks and rolling-stock. This greatly depressed prices, and the iron manufacture suffered, the consumption of pig-iron—which is the measure of the aggregate iron industry—falling off one-fourth, viz., from 2,500,000 tons in 1874 to 1,090,000 tons in 1876, and the price of bar iron falling from $96 in January, 1873, to $40 in January, 1879, or more than one-half. Such a decline in both production and prices marked many industries both in the United States and throughout Western Europe. The decline in prices extended so generally over all commodities, and, except where oscillations were occurring in modes of production,

or in the extent of the demand, it operated so evenly on all that Mr. Giffen, Mr. Goschen, and others of the best English economists held that it showed an advance in the purchasing power of money, equivalent to what would be produced by some extraordinary contraction in the volume of money.

Meanwhile, the bonds which, until 1872, had been undergoing export were returning to America for payment, nearly as rapidly as they had been exported. The American people cared little for the economic effect of extinguishing this large issue of readily exchangeable credit. They thought little of the question whether it amounted, in its effect upon prices and production, to that which would be produced by sinking $200,000,000 each year of coin into the Atlantic, or by extinguishing an equal quantity of Bank of England notes or consols. If a count of ayes and noes were taken, whether among the people, the statesmen of both political parties, or even the writers on finance, the very general verdict would be that the retirement of national debt of whatever magnitude, by payment, has no effect whatever on prices. The burning of a few of the non-interest-bearing notes of the United States, when attempted by Secretary McCulloch in 1866, was promptly vetoed by Congress, because of the effect such a contraction was presumed to have upon prices. But the burning of two thousand millions of notes (bonds) of the same debtor, bearing interest, after they had staved off national distress for eight years, by their paying qualities in international trade, is set down as something that should not be discussed in any connection with prices whatever.

Bonds that bear interest, however, are, as between Europe and America, as ready a means of purchase as coin, bullion, or bills. Their issue is inflating to the money markets of the world, and has its effect on prices, as positively as if they were bank-bills. Their retirement and cancelment must therefore be a corresponding contraction of the price-making medium. Looked upon as a contraction in the volume of international means of payment, the retirement of the American debt, in the degree it has taken place since 1865, the whole of which has been felt since 1873, is of itself sufficient to account for the fall in prices, of all commodities, which has marked this period.*

* Mr. W. L. Fawcett in "Gold and Debt" describes the period from 1850 to 1859 as the Era of Gold, and estimates that prices of commodities generally were enhanced between 1850 and 1854 by 45 per cent., but as the new gold supply declined in annual volume from 1855 to 1860, commodities lost nearly half this rise, falling back to a scale of prices 25

158. The Balance of Trade.—The doctrine of the balance of trade after enjoying the highest repute for two centuries, has passed of late into some contempt, and is often treated as an exploded theory. The growth of wealth in a country, however, must be proportionate to the increased activity of its production and exchanges in every form. As these are effected chiefly by the use of gold and silver, these two metals will move towards those countries whose rate of production is increasing, and from those whose rate of production is diminishing. If it appear that a country's exports of commodities, of its own production, exceed its imports, it is to be inferred that other countries are becoming indebted to it, and must pay the debt, sooner or later, by shipments to it of the precious metals. Therefore, in the absence of other causes, an excess of exports over imports, and a resulting inflow into a country of the money of other countries, are to be deemed evidences of its prosperity. This doctrine was fairly stated by Lord Bacon, in 1615, as follows: "This realm is much enriched of late years by the trade of mer-

---

per cent. above those of 1845. This was the effect, on prices, of increasing the stock of gold coin in the world, in thirty-five years, from 1477 millions of dollars to 2700 millions, or nearly doubling it. He describes the period from 1861 to 1876 as the Era of Debt, since the national debts of the world were increased in about this period from 9032 millions to 23,439 millions, or 2½ times; the railway debts from 2,000 millions in 1860 to 5,000 millions in 1880, also 2½ times; and the municipal and state debts in the same proportion, This increase of debt was accompanied by increase in average prices of all commodities. of from 60 to 65 per cent. above those of 1845, thus giving the increase in debt an efficiency in making prices as great as that in gold.

Mac Leod ("Principles of Econ. Phil.," vol. i. p. 204) says: "Adopting this definition, we may enumerate the different species of currency as follows:

"1. Coined money; gold, silver, and copper.

"2. The paper currency; *i. e.*, promissory notes and bills of exchange, with all their varieties.

"3. Simple debts of all sorts; such as credits in bankers' books, called deposits, book debts of traders, and private debts between individuals.

"It is obvious that there is no distinction in principle between the two latter species. They each denote that a transfer of some sort has taken place, and are a title to future payment. As a matter of convenience some of these are recorded on pieces of paper. It is certainly true that some of these descriptions of currency are more eligible and secure than others, and perform the same duties with different degrees of advantage. The metallic currency rests upon the credit of the state, that it is of the proper weight and fineness, and the universal readiness of people to receive it in return for services. Paper currency, in this country at least, rests entirely upon private credit, and is of all degrees of security, from a Bank of England note down to a private I O U. These different species of currency, therefore, though they possess different degrees of circulating power, though they may be more or less eligible or secure, represent but one fundamental idea—DEBT. From these considerations it follows that the amount of currency, or circulating medium, in any country is the *sum total of all the debts due to every individual in it.*"

chandise which the English drive in foreign parts ; and, if it be wisely managed, it must of necessity very much increase the wealth thereof, care being taken that the exportation exceed in value the importation, for then the balance of trade must of necessity be returned in coin or bullion." That a country may, for a period of years, be consuming wealth beyond its rate of production, and hence running in debt to other countries, and that this process of running in debt will be indicated by an excess of imports over exports, and that for an ensuing period it will be as actively engaged in paying off its foreign debt, or recalling its bonds, and that this process will be indicated by an excess of exports over imports, is clearly shown by the experience of the United States from 1865 to 1883. From 1865 to 1873 the United States was exporting its national bonds, and by the close of 1872 it had sent abroad about $1,800,000,000 of its debt. In the ensuing years it was recalling this debt and paying it off. The result is seen in the following table, showing the excess of imports over exports in the first of these periods, and the excess of exports over imports in the second :

	Domestic Exports.	Foreign Exports.	Total Exports.	Imports.	Excess of Exports over Imports.	Excess of Imports over Exports.
1862	179,644,024	11,026,477	190,670,501	189,356,677	1,313,824	
1863	186,003,912	17,960,535	203,964,447	243,335,815		39,371,368
1864	143,504,027	15,333,961	158,837,988	316,447,283		157,609,295
1865	136,940,248	29,089,055	166,029,303	238,745,580		72,716,277
1866	337,518,102	11,341,420	348,859,522	434,812,066		85,952,544
1867	279,786,809	14,719,332	294,506,141	395,761,096		101,254,955
1868	269,389,900	12,562,999	281,952,899	357,436,440		75,483,541
1869	275,166,697	10,951,000	286,117,697	417,506,379		131,388,682
1670	376,616,473	16,155,295	392,771,768	435,958,408		43,186 640
1871	428,398,908	14,421,270	442,820,178	520,223,684		77,403,506
1872	428,487,131	15,690.455	444,177,586	626,595,077		182,417,491
1873	505,033,439	17,446.483	522,479,922	642,136,210		119,656,288
1874	569,433,421	16,849,619	586,283,040	567,406,342	18,876,698	
1875	499,284,100	14,158,611	513,442,711	533,005,436		19,562,725
1876	525,582,247	14,802,424	540,384,671	460,741,190	79,643,481	
1877	589,670,224	12,804,996	602,475,220	451,323,126	151,152,094	
1878	680,709,286	14,156,498	694,865,766	437,051,532	257,814,234	
1879	698.340,790	12,098,651	710,439,441	445,777,775	264,661,666	
1880	823,946,353	11,692,305	835,438,658	667,954,746	167,683,912	
1881	883,925,947	18,451,399	902,377,346	642,664,628	259,712,718	
1882	733,239,732	17,302,525	750,542,257	724,639,574	25,902,683	
1883	804,223,632	19,615,770	823,839,402	723,180,914	100,658,488	

159. Doctrine of Balance of Trade.—The doctrine of the balance of trade is still accepted as true among practical statesmen and by judicious economists. Even McCulloch, in the extracts cited concerning the crises of 1847 and 1857, virtually recognizes it as the law governing both crises. Captious writers have made so much of certain qualifications of the doctrine as to assume

that they overthrow the original doctrine. In fact, they are in perfect harmony with it. For instance, a creditor country, like England, which is largely engaged in lending its capital on interest, in other countries, will become entitled, in payment of interest on these loans, to a large inflow of money, and it may choose to take this inflow in food and raw products instead of money. In this case, as the food and raw products imported appear in its trade returns as imports of merchandise, and the capitals it loans do not appear as exports, there will be a continually increasing apparent balance of trade against it, where there would be none if the foreign loans of its capital were treated as an export of a commodity, which they certainly are. Hence this qualification is not a qualification or exception in principle to the doctrine of the balance of trade, but only a fact going to show that, owing to the failure of the trade returns to include exports of capital among exports of commodities, the apparent evidences of the balance of trade, in great money-lending countries, is marred by an error of statistical omission, which needs to be supplied before attempting to state the true balance of trade.

Again, where the money-lending country happens also to be the ship-owning and carrying country, it will be entitled to freights on the imports and exports of both countries. These freight earnings will lessen the quantity of domestic merchandise it needs to send abroad in order to balance its accounts with them, and hence, by lessening its necessary exports, will appear on the trade returns as increasing the excess of its imports over its exports, or the adverse balance in its trade.

This, also, is evidently an error in its trade returns to show the true balance. In correction of this error, its annual exports need to be increased by its annual freight earnings, as these are, in effect, an export of services in carrying goods to the countries for and to which the carrying is done. With these corrections of the trade returns, and such others as may be necessary to bring them into conformity with the actual facts, the doctrine as stated by Bacon remains true.

160. Are Crises Useful or Penal?—Commercial and monetary crises perform, in certain ways, a useful function in industry, and tend ultimately to promote production, while at first discouraging it. They correct a tendency of industry to continue in given channels after they have become unproductive, or less productive than those to which they need to be directed.

The production of gold and silver, in increasing quantities, is at

all times, in one sense, one of the most profitable of industries. Yet it is easy to conceive that a sufficient force of the world's labor might be diverted from producing food, clothing, and shelter, to producing an increase in the volume of money, to have the effect of rendering money almost valueless and food, clothing, and shelter almost unpurchasable. The severe crises which follow large additions to the volume of money of either kind, whether it be bank notes, as in 1837 in the United States, gold and notes, as in 1824 in England, and 1851–7 in America, or government debt, as in 1865–73 in the United States, are usually, and perhaps necessarily, followed by a diminution in the number of persons who seek to supply a circulating medium for commerce and an increase in the number who till the soil, spin, weave, dig ore, build houses, and provide food, clothing, and shelter. Commercial crises remit a people from an excessive manufacture of media of exchange, such as money, credit, means of transportation, ships, railroads, and the like, to a larger relative manufacture of products for exchange, whether cloth, corn, or iron. They rectify the steering of industry, which tends naturally to keep on forever, unless checked, in routines of profit-making which have for a time been profitable, but which become unprofitable to the world at large when persisted in too long. Commercial crises, in these instances, are a means of correcting undue persistence in the beaten ways of industry, and of turning labor and capital into the new and unbeaten ways where they are more needed. Industry needs to be migratory in order to attain its highest evolution. It must carry the old pursuits, stock-raising, farming, lumbering, and housebuilding, to new countries, and carry them on under new conditions. It must carry them on in the old countries with new methods, processes, and machinery. It must discover new utilities in well-known substances, new economies in familiar callings, new plants and animals for the food of man, new soils for producing them, and new manures for restoring exhausted soils. So long as old industries, pursued in the old way, continue to be a means of certain livelihood to those engaged in them, the tendency of employers will be to meet that declining rate of profit, which attends the long-continued employment of capital in any one direction, by cutting down wages, rents, and interest. But this is to substitute parsimony, or meanness, for enterprise and migration. The interests of the world forbid it. A commercial crisis, sweeping all values away like a whirlwind, by making failure universal, prevents it from being mortifying or paralyzing.

All conductors of industry and employers of labor, whose position is weak, are weeded out and must look for "something new." In the universal search for "something new" those new industries are found and developed, in which society is chiefly interested because in them lie eventually the great profits and the great utilities. The crisis of 1816–19 in the South turned capital into the production of cotton, resulting in 1846, according to Dr. Carey's computation, in the production of six times as great a quantity of raw cotton for the same cost. The crisis of 1836–7 in America diverted vast quantities of capital and labor to the tillage of land in the Northwestern States. That of 1857 turned American capital away from ship-owning to railway building, away from foreign transportation to domestic transportation, and resulted in the development in America of a railway system equal in mileage to that of all Europe. In some cases, as in that of Vanderbilt, the very men who had struggled against the difficulties of conducting a profitable carrying business at sea, found the same degree of enterprise and courage rewarded with overwhelming success when diverted to the development of the railroad system and internal commerce of the United States. That there was an immediate economic need of this diversion of capital, is shown by the fact that, from 1851 to 1860, the fortunes invested in trying to bring us into relations of close trade dependence upon England, by fast steamer-lines and great importing-houses in New York, were all wrecked, shattered, or diverted to other channels, while from 1860 to 1880 those invested in developing the internal trade between different portions of the United States by railway, and in evolving American industries in all forms, rose into commanding importance.

In other, and perhaps the more numerous class of cases, commercial crises are the penalty for economic mismanagement, and generally on the part of government. The indirect good that may come of them, as some indirect good comes of all evil, should not blind us to the fact that they are, as a rule, the penalty of some untoward disaster to the currency, or of some subversion of domestic by competing foreign industry. Such were the crises of 1817–19, 1833–37, 1857–1860 in the United States, and of 1824–6 and 1847 in England.

CHAPTER XI.

THE STATE.

161. Government is Natural.—All mankind, like the higher animals, are endowed by nature with a desire for power, and a tendency to worship such powers as they suppose to be above their own power. The former induces them to lead, the latter makes it their pride to obey leaders whom they feel to be stronger than themselves. By this conjunction of ambition and fear, the buffalo of the broadest shoulders and stoutest horns, or even the elephant of longest tusks and greatest sagacity, leads the herd. The wild goose of strongest wing guides the flock in its migrations, and the sparrows battle in the road-dust for leadership. In the human race the qualities which excel in fight—viz., courage, craft, cunning, and prompt assumption of responsibility, or readiness to usurp power, together with physical strength—are those which first promote to leadership. It is only when men are far advanced that eloquence, argument, public spirit, and later a sense of fairness and equity, begin to prevail. In the first instance, the governing class incur the danger and contests necessary to lift them to power, because they crave the power for the sake of the dignity and command over others which it brings. Later, this harsh selfishness of ambition is invested in politer forms, and is softened by public spirit and desire for the general welfare. It would not be safe to assume, however, that the dominant passion of ambition or love of power ever becomes, in fact, wholly subordinated to unselfish aims, or that any system of society would be successful, if its success depends upon such a subordination of ambition. The statesman calculates upon the perpetuity of the fundamental and basic passions of human nature, such as the love of power, of freedom, of life, of property, of law, of sex, of religion, of art, of beauty, and of society, as being constant and nearly unchangeable factors, with which government must deal, and whose existence it must assume, as the chemist assumes his simple substances, or as geometry assumes the three dimensions. Government exists, therefore, because man is, by virtue of his

inherent structure, a governing and obeying creature, in the same sense as life exists, because he is a breathing creature, and as pleasure and pain exist because he is a sentient creature. We could as easily think of man without sensation, or without breath, as without government. Nature, in constituting man, kindly ordains that the functions of life which are essential to his existence, shall not be subject to his will in any degree. These are the circulation of his blood, the digestion of his food, the transmission of his sensations, and the reaction of his passions of anger and resistance against those forces which threaten his life. Above these are a class of functions which can, in a partial degree, be left to his choice, but concerning which he is nerved to action by forces so predominating as to be but partially repressible factors in controlling his will, leaving him a measure of choice as to means, opportunities, and occasions, but binding him by the strongest ties of emotion to the general result. These are the maintenance of the family, the reproduction of his kind, the accumulation of property, and the appropriation of land. In relation to these duties man occupies an intermediate position between choice and necessity, or between judgment and instinct. He is permitted, as a race, no choice as to the general result, but is permitted, as an individual, to believe in his freedom as to means and occasions. Midway between the first and second class of functions is that of government. It is somewhat more consciously voluntary than the circulation of the blood or digestion, but it is far less so than industry or reproduction.

162. Interest Organizes Industry.—In the broadest sense, man in society may be said always to be under two forms of government, one of which, though involuntary in its origin, is conscious in its action, and this is that which is ordinarily called government, or the state. The other is a far more perfect and searching mode of government than the state, being that government of interest, inherent in human nature, arising in the desire to acquire property, which places mankind in the several relations to each other, of merchant and customer, employer and employee, seller and buyer, landlord and tenant, borrower and lender, the aggregate of which relations constitutes the organization of modern industrial society through capital. Industry, or business, is not ordinarily treated, or recognized, as a mode of government, because it is an unconscious government. The men who take part in it do not consciously intend to govern or to be governed. They intend, each and all, only to benefit, each man himself, and those

immediately dependent on him. But the whole operates through the instinct of gain to effect a thorough, though unconscious, organization of society, in which each is assigned to the work he shows himself most nearly competent to do, is rewarded according to the value of his service to society, and is promoted according to his skill. In it promotion in command depends on economy in expenditure, sagacity in investment, and activity in promoting production. That it is a mode of service is shown by the ordinary phrases: "The merchant's success depends on the assiduity with which he *serves* his customers." "The manufacturer must be quick to perceive changes in the public taste and comply with the public demand." "The borrower is servant to the lender." Those who would secure employment and thrift, in serving the powerful, must defer or bend in judgment to those they purport to serve, as neither the powerful nor the weak can make any trustworthy use of the services of one who substitutes his own judgment, or lack of judgment, for that of his employer. This rule is expressed in the mottoes, "Obey orders if you break owners"; "Hew to the line, let the chips fall where they may," etc. The same social action is subject to be described either in terms of praise or dispraise, according to the momentary bias of the describer. Thus Shakespeare at one time sneers at subserviency, in words of dispraise. It

> "—Crooks the pregnant hinges of the knee
> That thrift may follow fawning."

At another he describes the opposite feeling of pride, which will not defer as a

> "Vaulting ambition doth o'erleap itself,
> And fall on 'tother—"

Merchants, accepting the services of clerks, require that they shall be "of good address and possessed of tact," meaning thereby the faculty of discovering adroitly, and serving readily, the wants of those seeking to buy. Society, outside the family, is thus welded together by links of reciprocal interest, and mutual service, into an organized body, having far more than the efficiency of an army, in accomplishing the daily miracle of equal, or nearly equal, universal supply of the necessaries required for human consumption. That this unconscious form of government, through industry or business, is more searching and pervasive in its influence over human conduct, than the conscious government which we call the state, is shown by the fact that the majority of men are

seldom brought into contact with the state in any manner. It is only as they pay taxes, vote, sue, or are sued in the courts of law, are punished for some crime, sit as jurors or hold an office, that they are reminded of, or in any way governed by, the state. But every time they do any act, for hire or profit, buy, sell, or produce, contract or discharge, earn or pay any thing, indeed every move they make to better their lot, or increase their means of living, is an act of association or commerce with their fellow-men, whereby they, by an instinct of which they are themselves unconscious, become links, cogs, wheels, weights, pulleys, or pivots in the social mechanism commonly called industry or business, the aggregate effect of which is to compel each to work for all, and all for each, in mutual helpfulness.

163. The Motive Force in Industry.—The government, which is effected through industry, knows of but one form of coercion or punishment, viz., want. This spectre, stalking behind and stimulating all men to energy, can be laid only by one exorcism, viz., wealth, which is, in all cases, labor performed.

Between these two natural inducements, want and wealth, the human soul swings like a pendulum, in all its efforts. These driving forces impel man on his career, being, in economics, exactly what ignorance and wisdom are in thought, what right and wrong are in ethics, what hope and fear are in emotion, what pleasure and pain are in sensation, and what time and space are in being, viz., the ultimate or first principles which must be assumed to exist before we can think of economics, ethics, thought, emotion, sensation or being, as having any existence. Nor is any one form of the state necessarily more favorable than another, to the promotion of Industry. In the domain of economics, the state is regarded as the product of the social conditions in which it arises, although, upon being created, it has also vast power to change and improve social conditions, for those who are to come. It may be likened to an individual. Every man is, in one sense, produced or caused to be what he is, by his environment, *i. e.*, his parentage, race, health, sex, place of birth, education, etc. But, being so produced, he becomes an efficient actor in controlling the conditions into which future generations are to be born. So a state is what its antecedents in history make it, but it is the author of its own consequents, and to this extent, while previous history makes it, it makes subsequent history.

The causes of the constitution of a state, therefore, must be

sought in the material conditions of its people. If their possessions are both equal in distribution, and small in value, as among the North American Indians, and especially if their land be held in common, their mode of government will be that of a democratic tribe, choosing their chief, debating as equals, but as savages. If their properties are more considerable, and still equal, they will be a democratic state like Sparta, or if like the Spartans and Athenians they own slaves, the state will still be democratic as to the free citizens, and aristocratic as to the slaves, as was Sparta. The ownership of equal properties by the citizens of a state will, in turn, usually spring from certain race peculiarities, such as were possessed by the Greeks and early Romans, such as bravery in the contest for personal rights, monogamy, the inviolability of the family relation, and the mountainous and easily defensible condition of the country, a diet of meat, mixed foods, and wines on the part of the people, a moderately fertile soil, such an access to rivers or the sea as favors commerce, and such a variability of climate as makes forethought necessary to existence. A population of industrial, physical, and mental equals, like that of Switzerland, develop into a democracy in government. If they acquire wealth, like Athens, the democracy becomes æsthetic, poetic, philosophic, artistic. If they remain poor, like the Spartans, the government becomes heroic, truculent, barren in art, and warlike.

Deprived of the stimulus of a changeable climate, as is China, which is shut in on the north by great ranges of mountains, and left open to the southward, a people will accept a vegetarian diet, will abhor innovation, and will shirk all contest, change, and revolution,—hence will come under a bureaucratic, paternal despotism. If, as in Tartary, the climate be severely changeable, the people will be wandering, nomadic, and tribal. A permanent subdivision of the land into large estates gives rise to a nobility, and the union of the church with the state helps still more to render the government aristocratic. Activity in manufactures and commerce causes money to be a potent factor in government, and eloquence to decline. In the infancy of society, power is apt to be in either the soldiers or the priesthood. Later on it is in the soldiers and lawyers. As suffrage extends to the masses of the people it passes to those who are apt popular orators or political leaders. Among these the great capitalists and corporations often buy their way to power. Rome, and probably Egypt, reached this stage shortly before either passed by conquest under barbarian sway.

Hence governments grow out of social and material conditions. That form which to one people will be spontaneous and inevitable, to another would be unnatural and impossible.

164. Forms of Government Depend on the Evolution of Occupations.—Each form of government being the outgrowth of the conditions under which it comes into existence, the presumption for all practical purposes is that each government is that which is best adapted to its own people, at the time and under the conditions in which it arises. But, under every government, there is a majority, to whom the government may seem to be the best possible, and a minority, who may prefer another, or think it even the worst possible. The question, which party has the majority, is determined, in ruder times, by conspiring and fighting, and in more republican periods, by debating and voting. Under either system, the change of a small number of influential persons may change the majority into a minority, and thus effect a change of government. The inference that each government is, for the time being, the one which is best adapted to the welfare of its own people, is subject therefore to a degree of doubt proportionate to the numerical strength and intensity of dissatisfaction of the minority, and the probability that the minority will, at any time, obtain the ascendency.

To-day a secular, anti-clerical republic exists in France. It confiscates the prerogatives, and, in a degree, the property, of the church, and limits and curtails the power of the priests and religious orders. Its strength lies in the fact that it represents the banking, manufacturing, and business men, or *bourgeoisie*, of France, and therefore its material interests. Against these are arrayed the Catholic or ultramontane party, which includes the priesthood, peasantry, or small farmers, and the Bonapartists and Bourbonists. It rests on the still surviving strength of those elements of rank, loyalty, moral conservatism, and social fealty which once organized society, almost without the help of money, or commercial motives, but which now are inferior to these more modern social forces. At present the Republic affords the presumption that it is the best government which France admits of, by being in power, and controlling an effective majority. It is, at all times, possible that the numbers opposing it exceed the numbers favoring it. Should it go out of power, in behalf of a government composed of the elements which now oppose it, the like presumption would immediately attach to its successor, subject, like the present government, to a doubt proportioned to the numerical,

intellectual, economic, and military strength of the elements of that party which is now in power, but would then be out of power.

All governments, even the most imperial, hereditary, or despotic, are created and maintained by parties, but, in periods of military force, the co-existence of the minority party is a suppressed fact. However despotic the form, and however military force may be necessary to maintain and change it, the utmost that any government can obtain is a party, or section, of the people, in its favor. Russia, under the czars, is governed by a Pan-Slavist party, and this government is opposed by the races which do not like the ascendency of the Slavs, and also by the Nihilists. China has been governed, for centuries, by a Tartar party. Italy is governed by a party favoring a kingdom distinct from the papacy, and resisted by a party desiring no king but the Pope.

The persons who come into prominence as czars, kings, emperors, cæsars, popes, presidents, or governors, legislators and notables, can not escape being the representatives of majority parties, compelled to suppress, by coercion, any minority party that may oppose them, by methods in conflict with the fundamental law, or constitution, of the country.

All countries have a fundamental law, or constitution, or body of ancient customs, in professed subordination to which the monarch, executive, and other officials for the time being, hold power.

In countries which have no written constitution, there are the ancient customs and usages of the realm. Every monarch enters upon his duties by promising, in some religious form, to protect, defend, and obey these ancient usages, customs, and laws.

165. Governments Classified.—A government, whose administrators can be changed only by fighting, may be classed as despotic. One whose officers can be changed by voting, or the ballot, may be classed as popular, or free.

Governments are frequently classified as Monarchical, Aristocratic, Bureaucratic, Hereditary, Imperial, Kingly, Parliamentary, Republican, Representative, Democratic, and Responsible.

These are useful names, but are liable to vary greatly in the essence, or meaning, they are made to cover. In Ancient Rome, under thoroughly Republican names, cæsars and tyrants became dictators. On the other hand, under monarchical forms, as in modern Great Britain, a comparatively perfect liberty of changing the government by ballot may come to exist. Pope's couplet,

> "For forms of government let fools contest,
> That which is best administered is best,"

to express the American view, should be so modified as to read:

> "For forms of government the wise contest,
> Since that wherein the people rule is best."

The experience of republics, and especially of America, has probably served to satisfy many persons, though not a majority, that the prerogatives of government may, in some subordinate localities, be devolved on persons who will make so bad a use of them as to bring limited examples of free government, at least in great cities, into unfavorable contrast with the governments of other cities which are presumed to be less free. There is strong ground to claim that London, Paris, Berlin, Madrid, Rome, Vienna, and St. Petersburg have better municipal governments than New York, Philadelphia, Buffalo, Chicago, and San Francisco. There is also ground to claim, however, that this is in part owing to the more rapid growth of the American cities, in wealth, and the more unstable and shifting character of their population. If so, it is believed that it may be corrected in time.

The concentration of all the elements of rule in one person constitutes monarchy. Usually, it is accompanied by the principle of the hereditary transmission of this authority to the heir; but in exceptional cases, like that of the Pope of Rome, the King of Poland, and a few others, the transmission has been by election.

An aristocracy occurs wherever a small number of persons or families, by reason of wealth, of inherited rank which originally implied wealth, or by military services and rank, or priestly power, or learning, or other personal quality, obtain as a class an ascendency in the State, which mere numbers can not, by voting, overcome. As the word aristocracy means a government by the best men, and those who oppose aristocracies always deny that they are composed of, or result in, the selection of the best men, the words "oligarchy," meaning government by a few, and "plutocracy," meaning government by the rich, have been, by those opposing them, substituted for the word aristocracy, to avoid this implication.

Athens and Sparta were aristocratic, as respected the relations of the citizens to the helots. Hence Aristotle's work upon economics and politics breathes throughout a most aristocratic spirit. Aristocracy has been a strongly molding principle in all the governments of modern Europe, and in the Republic and Empire

of Rome, from which they are, in great part, derived. In England the nobility and land-owning gentry represent the aristocratic spirit, and have usually furnished the entire House of Lords, two-thirds of the members of the House of Commons, a large portion of the officers of the army, the church, and the civil service, besides contributing, in more than their numerical proportion, to the bar, the bench, and the literature of the country. "Bureaucratic" government is an irregular word in formation, since it is compounded of a French word with a Greek, but convenient in use to express a government by a monarch, through administrative officers only, without a parliament, or national deliberative assembly, as in Russia. Sometimes, as in Germany, it indicates that the function of the parliament is advisory merely, and that the monarch, through his administrative bureaus, can, if he chooses, govern without a parliament. Bureaucracy signifies much the same as absolutism, except that absolutism relates to the principle or the effect, while bureaucracy defines the means employed to render the monarch absolute, viz., the bureaus or departments, or subalterns of the executive. The bureaus, or departments, correspond to what in America would be called the cabinet, the civil service, or postmasters, revenue collectors, marshals, etc., and the judges. Hence, in a bureaucracy, the monarch dispenses with the guidance of a parliament, or legislature, by substituting for it the advice of his counsellors and officers of every grade, civil, military, and religious.

166. Parliamentary and Representative States. — Parliamentary government is government by a deliberative body, or a government wherein the nominal monarch is under a constitutional obligation to defer to, and obey, the will of the national legislature. England, Italy, Spain, Austro-Hungary, Greece, and Servia are parliamentary governments. Germany is parliamentary in a proximate degree, but its present monarch denies that he is bound to obey parliament any farther than he believes its laws to be right, and consistent with public safety.

Parliamentary government is also essentially identical with responsible government, though the latter relates to the position in which the ministry is placed under the system, while the former expresses the supremacy it imparts to the legislature.

Responsible government is the system wherein constitutional advisers of the crown, usually styled his ministers, heads of departments, or cabinet, are required to obey the dictation of the national legislature. The mode in which this is effected is by re-

garding them as having advised every act of legislation proposed by the crown, and every administrative policy or order adopted by it ; and by holding them obliged in honor to resign, if an adverse vote is given, against such a measure, in the popular branch of parliament. The ministry, however, instead of resigning, may dissolve parliament, which is called appealing to the country. In the new election of members of parliament, which is then held, the people are supposed to vote for members who will either agree with the previous action of the ministers, or with the previous action of parliament. If the new parliament agrees with the previous action of the ministers, they remain in office, as legislation can then move on in harmony. The bill, which the previous parliament voted down, will then pass. If, on the contrary, the new parliament agrees with the previous parliament the ministers will resign, and the monarch will be called upon to select a new ministry, in harmony with the views of the two successive parliaments. Hence, under the responsible system, the veto power of the monarch becomes obsolete, and parliament becomes supreme. The governments which embody the responsible system are: England, in which it originated; all the English colonies which have legislatures, except West Australia; the French Republic, the Empire of Austro-Hungary, Italy, Spain, Servia, Greece, Belgium, Holland, and Denmark. It is equally applicable to republics, monarchies, aristocracies, democracies, and empires. It had not taken form, in England, at the date of the separation of the United States from England, and was not therefore known, or discussed, by those statesmen who framed the American constitutions, state and federal.

Its originating germs are to be found in the execution of Charles I., in the supersedure of James II. and election of William of Orange, and in the various constitutional laws settling the succession to the crown, and prescribing the qualifications and conditions on which it may be held. The doctrine that the throne is bound to obey the House of Commons, either as it now is (when a question arises) or as it shall be after one election has tested the popular will on that question, has grown up so mysteriously that it is difficult to find a date for its origin. It is the exterior sign of the evolution of England from the military through the aristocratic into a commercial state. The kingly office originates in and is vital during the military stage. Of dukes, marquises, earls, counts, viscounts, barons, and knights, all are military titles, and reflect the military life, except earls and barons. It is because the

House of Commons reflects business, commerce, and profit that it existed only by sufferance in the military period, but leaves the throne to exist by sufferance in this modern life. We find George III., in 1782-83, refusing to retire Lord North's ministry, which had led the war for the subjugation of America, and accepting the new Shelburne ministry, in which Pitt and Fox, the champions of American independence, were to be leading spirits. He declared frequently that his honor demanded that he should abandon the throne and return to Hanover, rather than submit to the aggressions of the Commons. A royal yacht was actually summoned, and was several times in waiting to bear him away. In time he yielded, content to escape the threatened necessity of having Fox himself, whom he chiefly hated, as premier. So comparatively modern, however, is the blunt statement of the doctrine that the king is subordinate to the Commons, that there seemed a flavor of radicalism in the exclamation of Mr. Roebuck in 1858: "The crown, it is the House of Commons!" The growth of the House of Commons itself is as gradual as is the rise of England's industries. Under the Saxon constitution (to 1060) there was no House of Commons. The *Witenagemot* * included in a crude way the rudiments of a council of state, a court of justice, and a house of lords, but with the informality of a town meeting. It was more like the consultation of an Indian chief with his braves, or of the leader of a hunt with his associates in the chase. Prof. Freeman holds that it was a council of all who chose to attend, and that the present House of Lords is the regular successor of the early mass conventions of the people, irrespective of rank, reduced to paucity of numbers only by the inability and disinclination of the poorer classes to sustain the expense of attending. Guizot † holds that at first the clergy, nobles, county knights, and burghers each sat or met by itself, and voted by itself in contributing taxes, one voting perhaps a tenth, another an eighth, or other proportion. Prof. Freeman's theory seems at war with the rule that the more barbarous and military the epoch, the more monarchical or aristocratic is usually the organization of society. Local magistrates and county knights may have occasionally sat in the same body as the lords, but the evidences are rather that as early as they sat at all they sat separately both from the lords and from each other, as a petitioning or complaining body, while the lords were a consulting body. In 1265, fifty years after Magna

* See E. A. Freeman in *International Review* for November, 1876.

† On "Representative Government."

Charta, borough representation was first actually witnessed. A century later the House of Commons was strong enough to complain of the king's ministers, and, for the first time, to exercise its power of impeachment. Hallam declares that at the close of the fourteenth century their consent was necessary to the levy of money taxes, and to the enactment of laws, and that they had frequently exercised the power of inspecting and controlling the administration of government. From this period to the present the king's ministers have been complained of by the House of Commons, at first very meekly and humbly, as an oppressed tenant might complain to his lord of a despotic or hard steward, but in due time grown stronger, through impeachments and executions, until finally their slightest dissatisfaction with a minister has come to be politely deferred to, through resignations. Yet, down to the reign of Henry V. (1413) the House of Commons, in form, merely petitioned.* The king enacted, with the advice and consent of his lords. An impeachment was in form only the humble petition of the Commons that the king's evil advisers might be arraigned and tried before the Lords. Thus gradually the ministers passed, by a transition which extended over 600 years, from being favorites and lackeys of an absolute monarch, whom they could advise only because they pleased him, into rulers selected by the House of Commons to do the actual work of governing, while the king merely reigned.

The responsibility, which began as an individual one on the part of each minister, began to be a collective responsibility on the part of "the ministry" after the revolution of 1688. A century earlier Queen Mary had thought it no infraction of the constitution to dissolve several successive parliaments, with the view of getting one subservient to her wishes. Since the accession of William of Orange, and especially since the failure of the last "personal" reign, that of George III., in the matter of America, the theory that the king must have no personal policy, but that the House of Commons must fix the policy of the king, has slowly ripened into constitutional law. Sir William Blackstone, writing exhaustively upon all the tassels and tinsel of royalty in the fourteenth to eighteenth years of the reign of George III. (1774–8), wholly fails to detect the doctrine. Alexander Hamilton, in the sixty-ninth letter in *The Federalist*, would have stated the doctrine with judicial fairness if he had ever heard of it. But he

* Guizot on Representative Government, pp. 466, 467, 482, 507, 513, 517.

says that the king's veto was then in disuse only because the crown had found it more easy to control parliament by its arts than by its prerogative.* Blackstone may have ignored the doctrine through toryism, and Hamilton may have written sarcastically; but there is hardly any evidence that, in their period, this had yet become even a tenet of Whig politics, still less that it was an accepted doctrine of the English constitution. History must, therefore, award chiefly to Queen Victoria's reign the credit of having first displayed the conscientious and admirable non-partisanship which was necessary to engraft this principle firmly into the British constitution. The queen has done this without seeking to influence personally either the popular elections, by which the complexion of the House should be determined, or the course of discussion by which its majorities should be controlled.

The English ministry at present consists of thirty-one persons, of whom from eleven to sixteen form the cabinet, the others being usually heads of bureaus, but not consulting officers of the crown. The cabinet includes the first lord of the treasury, chancellor of the exchequer, lord chancellor, president of the council, lord privy seal, secretaries of state for the home department, for foreign affairs, for the colonies, for war, and for India, first lord of the admiralty, first commissioner of works, chief secretary for Ireland, and generally also the president of the local government board, vice-president of the education committee of the privy council, and the chancellor of the Duchy of Lancaster. The actual executive officers who administer the government are known as "ministers with a portfolio," *i. e.*, having the responsible headship of a department, and are cabinet members. The selection of the cabinet from among the ministers is not always the same. Generally the premier has been the first lord of the treasury, sometimes the chancellor of the exchequer, sometimes both; and sometimes, as in the case of William Pitt, a secretary of state.

The crown, through its ministry, takes the initiative usually in

---

* In Letter LXIX. of *The Federalist*, Alexander Hamilton says:

"The King of Great Britain, on his part, has an absolute negative upon the acts of the two houses of parliament. The disuse of that power for a considerable time past does not affect the reality of its existence, and is to be ascribed wholly to the crown having found the means of substituting influence for authority, or the art of gaining a majority in one or the other of the two houses, for the necessity of exerting a prerogative, which could seldom be exerted without hazarding some degree of national agitation."

legislation, preparing, proposing, and defending in parliament the bills and measures on which it stakes its success as an administration. So long as these measures are concurred in by the last elected House, they are presumed to accord with the will of the voting constituency. For securing harmony toward the ministerial measures, certain members of the ministry need to have seats in the House of Commons ; as these do not accrue to them by virtue of their selection as ministers, they must be elected by some constituency to a seat in the House.

A member of the British cabinet is usually also a member of the House of Lords or House of Commons, the latter being in modern times the more effective position; he is also a member of the queen's privy council, a somewhat indefinite body of eminent persons, including many not in the cabinet or ministry. It is somewhat as if the President of the United States should, by usage, select his cabinet from among the more prominent members of the Senate and House, these members combining to perform their representative functions in addition to their cabinet duties. The chief legislative duty of the leading cabinet officers, after devising measures for the consideration of parliament, is to defend these measures on the floor of either house. The chief duty of the leaders of the opposition is to carefully avoid opposing a government measure otherwise than by criticism of its details, unless they have something better and more in harmony with the public will to propose. This insures that habitual moderation, caution, and candor which distinguish English speeches in parliament. They seem inferior to American speeches in statistical and legal acquirement, are less patriotic, and get down less frequently to bases of fundamental right and equity. But they are more guarded, discreet, and, as a rule, politic, and rest their case on expediency and exigency more than on principle.

When the wary and prudent leader of the opposition sees his antagonist adopt a policy on which he thinks he can be overthrown, first in the House of Commons, and then, if necessary, before the people, he attacks the offending measure, and the struggle in debate is not for the empty applause of the galleries, but for the control of the government. Each party puts forward its most powerful yet most judicious combatants. It is not a set speech or lecture, to be followed by handshakings of friends, printed and sent to one's constituents, and that is all. If successful it means a change of office and policy, and almost of necessity that the critic will succeed in office the statesman he is criticis-

ing. Such a struggle sorts men and develops statesmen, by an analysis far finer than any that can be made by any politicians in national conventions, or by any voters at the polls. The man it brings forward is, however, a great debater chiefly. It is worthy of note that great debaters are seldom regarded as the best administrators.

A government in which all power is conferred, either immediately or ultimately, by election or choice of the people, or of the majority of military force of the people, and no part of it by inheritance, purchase, or direct military force, is a republic. If the people elect a legislature, which enacts laws by virtue of the power thus delegated, as in the United States, it is a representative republic. The parliament of Great Britain is also a representative legislature, as respects its House of Commons. In the Roman republic, however, the representative principle did not exist. The people voted directly for their officers, and upon all statutes, or *leges*, submitted to them, according to one or the other of three modes of mustering or grouping, in one of which the power was chiefly in the patricians,* in another of which it was chiefly in the wealthy and the army,† and in the third of which it was in the plebeians or commonalty.‡

These modes of voting distinguished respectively the infancy, the ascendency and the decay of the state. In the earliest mode, known as the *Comitia Curiata*, only the patricians or aristocracy voted, but the vote of one patrician was equal to that of another, as in the British House of Lords. From that, Rome passed to the more complex vote by centuries, known as the *Comitia Centuriata*. The people were divided at the census into six classes, according to their wealth. As the purchasing power of Roman money can not be accurately expressed in modern money, it may be proximately accurate to say that all worth upwards of $1,000,000 were in the first class, and had thirty-five parts in a hundred of the voting power of the state, and furnished thirty-five hundredths of the army and the treasury. Those worth less than $1,000,000, and more than $500,000, were in the second class, and furnished one-quarter of the army and of the revenue, and enjoyed one-quarter of the voting power. An absolute union of the first and second classes, therefore, could carry any measure, and the vote of the other classes needed not to be taken. If, however, a vote of the first and second classes failed to exhibit a majority

* Comitia Curiata. † Comitia Centuriata. ‡ Comitia Tributa.

of the whole, then the third class, worth say $100,000, or the fourth, worth $50,000, or the fifth, worth $10,000, or the sixth, worth $500, would be consulted. In practice, the $500 class was seldom consulted.

Taxation and representation were brought into their logical coherency in a masterly way in this Roman system of voting by centuries. The right to cast a certain voting power grew out of the possession of a corresponding amount of assessed capital, and carried with it inseparably the obligation to contribute a corresponding ratio of the army and the revenue. This identity of taxation and representation did much toward advancing Rome to be the ruler of the world.

The third system of voting, known as voting by tribes, or *Comitia Tributa*, admitted the plebeians, freedmen, aliens, and non property-holders to vote on an equality with the aristocracy, whereupon, of course, the aristocracy stopped voting altogether, and the Roman mob became the saddle on which the Cæsars rode into power. Universal suffrage, divested of the counteracting influence of capital, became the stepping-stone to the complete abolition of all suffrage, first in value and then in use.

To this subject, among American statesmen, Mr. Calhoun in his celebrated "Disquisition on Government," and Mr. Webster in many of his speeches, have alluded. Whatever were Mr. Calhoun's inducements to reflect upon the insecurity of capital under a rule of numbers alone, he took the ground that governments are constitutional and enduring only when they combine the concurring majorities of each of the distinct forces which go to make up the power of society. If the priesthood and religion really govern society, as they do in Turkey, Italy, Spain, and Mexico, then they will have power enough to overturn any state in which they are not represented. If the landholders are the chief social force, as in Germany, France, and England, then a government which ignores the landholders, and rests, for instance, on the priests, must fall or give place to one in which the landholders are represented. If the army and the aristocracy are the chief forces in the state, as they were in Rome, then their ascendency must be acknowledged in the constitution, or they will overthrow the constitution which ignores them. And finally, if the church, and the army, and the landholders and capitalists, all cease to be a force in the state, as they do in communities where capital is equally diffused, and there are a hundred sects, and no standing army exists, there numbers become a

ruling power, and any constitution which fails to respect them will fall.

Mr. Calhoun defined a despotism as being a government which attempts to rule society exclusively by one of its forces, whether such force were the church, the army, the landholders, or mere numbers. He defined a constitutional government as one which provided for gathering up and representing the views of each of the ruling forces of the state in a co-ordinate branch of the legislature, in such a manner as to give to its united voice a veto on the action of the other forces of the state. If numbers, therefore, were represented in the lower branch of a state legislature, and capital in the upper, he called this a government by concurring majorities, *i. e.*, the majority or voice of numbers concurring with the majority or voice of capital; whereas, if numbers merely elected both branches of the legislature, the government not having provided itself with any machinery by which it could take the views or listen to the voice of capital, would be, as to capital, a hostile despotism, tending toward frequent encroachments and periodical culminations of force. Mr. Calhoun thought the majority would tend not only to tyrannize over the minority, but to vest so large a share of power in its individual chieftain, for the time being, as would extend his powers into absoluteness, while still wearing the title of an elective officer. Sooner or later he would brave both the will of the legislature and of the judiciary, perhaps also of his constitutional advisers and of his own party.

According to Mr. Calhoun's definition, our American governments represent but one of the forces of society, there being no provision for affording an authoritative expression to either capital, culture, character, or experience.

In marked contrast with the quasi-aristocratic views of men like Calhoun, Webster, and Hamilton, the socialist school inveigh with great bitterness against the ascendency which capital or individual capitalists obtain in all modern governments, and quite as much in those of the United States as in those which are more aristocratic in form. They point to the increasing ratio in which, with each recurring election, the millionaires seem to take the places which were formerly filled by orators and great lawyers in the Senate of the United States. They cite the vast expenses of conducting, not only presidential elections, but elections of members of Congress. These expenses are so great that it is alleged syndicates of capitalists, or at least a concurrent

action and system of contribution among capitalists, are essential to decide every election. In this manner, under the forms of equality and universal suffrage, a return is made to a government by the few.

Between Mr. Calhoun, on the ultra-aristocratic side, and Karl Marx, on the ultra-democratic, society at present maintains a complacent inertia. It is not terrified at the degree in which capital is now represented, nor alarmed lest it has not representation enough. A time may come, however, when it will consider whether a mere choice of capitalists sufficiently answers the requirement of a representation of capital. But that time is not yet.

The Greek republics were not representative, but questions were submitted to the whole people directly, in a manner resembling that of the American town-meeting.

167. Diversity of Form in Republics.—A republic therefore may be aristocratic, military, or democratic, representative or direct, and responsible, or having fixed terms of office for its legislators. If it consists of many states confederated into one, it becomes also a federal republic. The United States of America are a democratic, federal, representative republic, constituted on the principle of fixed terms of office for its legislators, and therefore without the principle of ministerial responsibility. Each State in the Union is a republic, of the same quality as the United States, except that it is single and not federal, and sovereign, as regards other States of the Union only, but subordinate as regards the federal government, and municipal merely as regards foreign nations. The judicial tribunal, with which it lies to decide in the last resort, for all judicial purposes, what are the relative powers of the national and state governments, is itself a part of the national government, viz., the Supreme Court of the United States.

The executive and legislative branches of the government of the United States did also, in the war for the suppression of the rebellion of the Southern States, in 1861-5, successfully decide, by military force, that it was the province of the general government to coerce a seceding State. Hence it may be assumed as settled that while the several States have a qualified sovereignty relatively to each other, to the extent recognized by the constitution of the United States, and while the United States is a government of limited and delegated powers, yet within the scope of these limited powers the sovereignty of the United States is supreme, and that of the several States is subordinate. As respects foreign nations,

the State of New York is as completely a subdivision of the American nation as Yorkshire or Scotland is of Great Britain.

France, relatively to the United States, is a highly centralized and military republic, which exercises the power of appointing mayors of cities, and controlling the police of the country, in details which, in the United States, are remitted to the several states. Mexico, on the contrary, is, relatively to the United States, an extremely decentralized republic, in the nature of a league of states. Each Mexican state levies import and export duties, independently of the central government, a power the denial of which to the several states under our system imparts a more perfect unity to the nation, than pertains to Mexico.

Forms of government differ chiefly in the mode of selecting the officers who are to constitute the mechanism, and vary comparatively little in the nature of the mechanism, or in the mode in which it runs when constituted. The mechanism itself always consists of a single controlling executive will, whether it be that of the emperor, czar, chancellor, premier, king, or president, in whom, in most cases, centers a power so large, that the whole power of the national legislature becomes, for the time being, advisory, and, in a practical sense, secondary, though (in parliamentary and republican governments) overruling, at least in theory. This central will is influenced by four classes of checks: (1) those imposed by an immediate group of personal advisers, the cabinet; (2) those imposed by the legislature, or national council, through permanent laws; (3) those imposed by the judiciary, and (4) those imposed by the constitution. The administrative force of the United States, numbering in the civil service upward of 100,000 persons, is subordinate to the executive; so are the army, and navy, and diplomatic force. These constitute, together, the entire administrative force, and this does not differ greatly, in *personnel* or duties, from what are called the bureaux in bureaucratic governments. All the machinery of the most absolute government exists, therefore, in a republic, and does the practical work of governing in the same manner as it is done under bureaucratic governments, so far as the absolute authority of the central head, for the time being, is concerned, except so far as it is held in check by the constitution, the judiciary, and the legislature.

Of the three departments, the executive, legislative, and judicial, the judicial is that which, at most times, seems to reach the citizen with most coercive force, since it is that alone which

is in the habit constantly of commanding his presence by its writs, of compelling his obedience by its punishments, and of arbitrarily overruling his judgments by its own. The legislative department, of a republic like that of the United States, affects him chiefly through its power to regulate tariffs on imports and money, to encourage navigation and maritime commerce, to provide for transporting the mails, and to influence war and peace, and the terms on which he shall render military service. The declaration in the American Constitution, that only Congress can declare war, is virtually futile, since declarations of war, as a usage of nations, have nearly ceased to exist, and in fact the steps which lead to war are, almost of necessity, acts of policy determinable only by the executive. It was so in the war with England in 1812, with Mexico in 1848, and with the Confederate States in 1861.

The powers of a republican president are thus practically as absolute, for the time being, as those of a British premier. So long as he avoids a vote overruling his veto, by two-thirds of both houses of Congress, he is not inferior to a Russian czar in actual potency. He has the same bureaus at command for enforcing his will, and the same control of the army and navy. Naturally, therefore, the machinery for selecting the president is of prime importance in a republic. Law governs only the formal act of voting. But anterior to the vote there is a campaign. This campaign knows no law. In monarchies the king reigns! This is fixed by law. But who governs? This is

> "Variable as the shade
> By the light-quivering aspen made."

Perhaps the courtiers, or the premier, or the chancellor. Philip of Macedon declared that Alexander, while a child, ruled Macedon. How? "His mother rules me, and he rules his mother!" So, in republics, the people reign—*i.e.*, they may change their rulers. But to change one's rulers is not to rule. Those rule who manage the machinery for selecting rulers.

For thirty-five years, from 1790 to 1825, the men already selected for office managed the machinery of election. This was when a caucus of Senators and Representatives of each party selected the candidates for President and Vice-President, to be voted for either by the people or by one party. The men who took part in it were necessarily familiar with practical legislation, with economics, with the presidential candidates, and with the duties of the presidential office.

A clause of the Federal Constitution provides that the electors of President and Vice-President should meet at the several state capitals, and there vote *by ballot*, and therefore in secret, as to the names of their candidates. Mr. Hamilton, in *The Federalist*, shows that it was expected to be a marked excellence of this system that no one would know beforehand, and that no one would need to know, or would have the right to know afterward, for whom any presidential elector should cast his vote. The framers of the Constitution had no experience to draw upon, of the effects which would be wrought upon the machinery for the selection of candidates, by so expanding the right of suffrage as to include all the male adult citizens, of widely separated states, in the one act of selection, and at the same time so extending the offices to which voting would apply, as to subject the chief executive office of a nation of 50,000,000 of people directly, or indirectly, to the popular choice. The only elections, with whose machinery they could have been familiar, were the Greek, Roman, English, German, Polish, Papal, and Colonial. The first were simple town meetings, and did not involve the element of voting for the same officer simultaneously by different constituencies, at widely separated polling places, and therefore did not call for an anterior series of party conventions to nominate candidates, in order that all who are in one party might vote for one man, and so secure the greatest strength possible for its real or supposed principles. At the English elections of members of Parliament the sheriff summoned all the voters of the county to the county-seat, one or two nominations were made *viva voce*, and a show of hands, or a gathering of the voters on opposite sides of a fence, enabled the sheriff to make the count, and he returned accordingly. The Roman system was more extended and complete. None afforded any precedent for the United States, except the Papal. The applicability of the latter, as a precedent, was observed, but not entirely followed, by those who framed the Federal Constitution. The College of Cardinals which elects the Pope is usually made up chiefly of Italians. It contains, however, many representatives of the Church in other nations. It therefore represents, though in very unequal ratio to their numbers, widely separated constituencies and about three times as many persons, as, even now, make up the American population.

This college meets and votes in virtual secresy. Each cardinal has his individual independence of choice, in the full degree that the framers of the American Constitution intended the members

of the American Electoral College to have. No anterior nomination of a candidate for the Papacy could avail if made, and there is no temptation to make one. The entire college, or body of electors, meet in one place. All the nominating, intriguing, and, if there be any, all the bargaining, must be done in this body, to be effective.

The framers of the American Constitution sought to remove the temptation to bargaining and corruption. They would preserve the independence of the presidential electors whom the people of the several States should choose, to make the choice for them, by having them vote at widely distant places. Then they could not bargain. Hence, they provided that the presidential electors should meet at the state capitals of their respective States, then 13, now 39, in number.

The effect was the wholly unforeseen one, that a bargain had first to be made, whom these electors should vote for. Precisely what the Constitution forbade, the people wanted, viz., a bargain. They did not want independent electors, but subservient electors, who would obey the popular will. They caused candidates for each party to be nominated in advance of the popular vote, not merely for electors as the Constitution designed, but for the chief officers themselves, with the implied result, that the electors would be bound by a political honor, stronger than law or covenant, to vote only for the one man for each office, who had been nominated by this anterior machinery of nomination. Until 1828, it was a caucus of members of Congress of each party. Since that date, it has been a national nominating convention of the members of each political party, selected by voluntary assemblies. All this lies wholly outside the constitution and the statutes. Probably, from its very nature, it can not be made law. Thus the electoral colleges become as many dummy bodies as there are States. The actual choice passes from the electoral college, in two fractions: one half of its intended powers is usurped by the nominating convention; the other half of it is usurped by voters at the polls. The privilege of choosing from among the whole people two or more candidates for President and Vice-President, so that each political party can, in pretending to vote for electors, in reality vote for its candidate, is usurped by the national conventions. The privilege of voting between these two or three candidates is usurped by the voters at the polls. The presidential electors abdicate their powers in favor, in part, of the voters directly, and, in part, of the nominating assemblies.

While they take an oath to support the Constitution of the United States, they forego the proper exercise, in their own persons, of that supreme judgment and choice, which the Constitution intends them to manifest, without outside dictation or suggestion.

In order to render such a dictation as that to which they submit, an impertinence, they are required to vote by ballot. They vote by ballot, but they accept the supposed impertinence as being strictly pertinent and proper. The departure, from the constitutional intent, is popular, because of the supposed necessity of making political parties represent principles. To this end they must unite in the assertion of these principles, in advance of an election, which they do by their platform. It is felt that the power of the people is thus increased; since, instead of voting merely for electors, they vote virtually for President. It is assumed, also, that the diffusion of intelligence through the press, among the people, is so general, that the voters in their primitive capacity are as good judges as the electoral colleges would be, both of the qualifications and qualities required in the presidential office, and of the possession of these requisites by the candidates. This democratic correction of the Constitution, without amendment, is no longer questioned. The document is popularly regarded as having shown an unnecessary and aristocratic distrust of the wisdom of the common people. Under a reign of the people this is the most unpopular of crimes.

The effect is that the people vote for candidates, whom not more than one in 100,000 of them knows personally, or has met in conjunction with any act of official duty. The pretended "information" communicated to them through the press, as the day of election draws near, degenerates into slanders for one candidate and fulsome overestimate of the good qualities of the other. The great mass of voters have no means of sifting the truth from the falsehood. They believe nothing, and "go it blind." To cause the constitutional system to be adhered to in its spirit, would require that, by amendment, the presidential electors should meet in one body, instead of in forty. This would abolish the function of the national conventions, and revive the electoral college, as a constitutional machinery of selection. The voters of each congressional district would then, in voting for one or more electors from their district, vote for a man whom most of them would know personally, and at the same time the electors of President and Vice-President would, when convened, consist of men of the rank of Senators and Con-

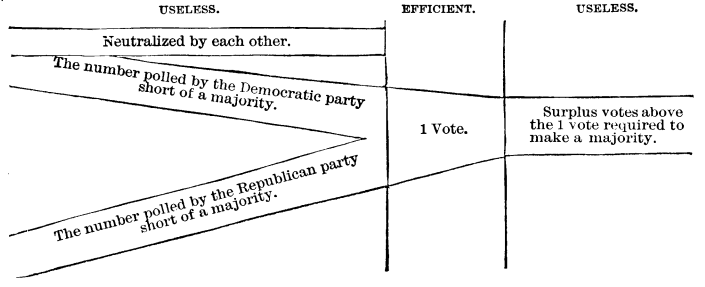
gressmen, and who would know personally much of the practical workings of the presidential office, and all the persons suggested by either party as candidates.

In any system of voting by majorities or pluralities, the two parties neutralize each other's votes up to the point where their equal voting ends. The majority only counts. Moreover, of all the votes in that majority, none but the first one has any legal efficiency in deciding the question. Hence, in a strict mathematical sense, all popular voting is decided by one vote.

Thus, in the vote between Blaine and Cleveland for the Presidency, the votes for Cleveland were 4,911,017. Those for Blaine were 4,848,334. The plurality was 62,683. The 4,848,334 votes cast for Blaine were neutralized wholly by the equivalent number cast for Cleveland. Of all the 62,683 votes which are supposed to form the effective plurality, only one vote has any legal efficiency. A conceded plurality of one would have been as effective, as one of 62,683. Hence all majority rule becomes, in the last analysis, the rule of ONE.

In the vote between candidates Hayes and Tilden in 1876, the vote as counted in the electoral college was one of 185 to 184, a decision by one vote. The question, however, whether it should be so counted was decided by a vote of 8 to 7 in an electoral commission, which had to be so constructed as to render such a decision possible, in order to render any decision whatever certain. The passage of the law, creating the electoral commission, was effected in each house, by votes of which none had any efficiency, except the one vote that effected a majority.

When passed its existence as law depended again upon the single vote of the President. The question to be decided in the election, turned upon the votes of a single State, Louisiana, and depended upon a popular vote, which was divisible into three parts, as follows:



The ultimate crisis, wherein the one or the few govern, may arise at one election in one place, and at another in quite a different place. When reached, there is always an equation between balancing quantities, which virtually eliminates them from the contest. Then there is a useless surplus, always thrown away. Cutting off all these, one vote decides.

This is felt in national conventions. Local primaries of every ward and town send delegates to the congressional or state convention. This in turn elects delegates to the national convention. In the first, so little interest is felt that it is difficult to get one-fifteenth of the persons entitled to vote at them, to take part in them. They know their votes there are mere counters, to be set off against opposing votes. The actual motive, for attending, is usually one of employment. Those who want political favor do this work to secure that favor. In the state conventions the interest is still listless, as respects their action in selecting delegates to the national convention, unless it is perceived in advance that THE UNIT VOTE which is to decide the national result is in that state convention. Then all is vim and fire. In the national convention, as each ballot is taken, there is merely anxious inquiry, until the vote nears the point where mathematicians on both sides have set off all the fixed and unchangeable votes against each other. This brings two candidates where the change of one vote will elect one or the other, at least to the candidacy. This, if parties are equal, brings him one chance, in two, of the election. In the Chicago conventions, of each party, in 1884, the excitement was of an intensity that indicated that it was actually and in fact here, in this wholly extra-constitutional body, that a President was being made. The prospect, that one vote would speedily determine the question, could be figured out by all. Through 36 ballotings, in the Republican convention of 1880, the call had been for Blaine 284 or thereabouts, for Grant 304 to 309, settling finally at 306, and the deadlock had worn every body out.

When it becomes known that neither of the two preferred candidates can be elected, some other must be taken. As it is little matter, to many of the delegates, who the other may be, it goes by panic. One vote from either side, and another and another, toward the new candidate, converts the action into a stampede. The effect of these straggling votes is foreseen by the immense assemblage. Each vote at this crisis is drowned in cheers and yells, because it is seen to be the one vote that tells. The rising

of the vast assemblage, and the waving of hats and handkerchiefs, laughing and weeping, crying, cheering, and embracing, all indicate the emotional crisis. Here, and not in the electoral college or at the polls, the true efficient choice is made, at least it is either in that convention or in its rival. When it is seen how the tide can be made to go by their votes, chairmen of the delegations of twenty States at once will rise to announce the change in the vote of their State. At the convention referred to, Garfield received no votes until the thirty-first ballot, and then only one; one on the thirty-second, and one on the thirty-third. On the thirty-fourth he rose to seventeen, on the thirty-fifth to fifty. This revealed him as the "dark horse" in the race, and on the thirty-sixth ballot he received 399, the number essential to a choice being 378. The persons who thus reduced the choice of the American people at the polls, to a choice between General Garfield and General W. S. Hancock, whose selection by the Democratic convention was arrived at in the same manner, were as few in number as those who would have decided it in the electoral college, had the spirit of the constitutional provision been found or made practicable, but they were not the same few.

So in the subsequent contest between Messrs. Cleveland and Blaine, the "few" whose casting votes determined the selection, in convention, of Cleveland on one side and Blaine on the other, were politicians of New York, to the number of a dozen in each party. Finally the contest was decided for the nation by a plurality, Mr. Blaine has said, of less than one-eleventh of one per cent. of the voters of New York at the polls. But, in theory, and in legal efficiency, every voter even of this small fraction existed as a useless surplus, after the one vote necessary to avoid a tie. None will be so obtuse as to suppose we overlook the value of a larger majority as a means to avoid a strife over the question whether this plurality of one exists. But the legal and constitutional efficiency all centers in the one vote. As all government by majorities is thus reducible in final analysis to a selection by a few, and a decision by one, it is a delusion to suppose that democratic institutions can impart governing efficiency to each individual of the whole numerical mass. The number of persons, in whose breasts it lies to exercise a final efficient choice, on economic or administrative questions, is somewhat larger in republics, than in monarchies, but it is by no means so much larger as many suppose. In America the governing class, as represented by the officers finally chosen to perform the work of the federal and

state governments, is very large, and may be larger than in most countries. In some phases it shows greater cost. Thus the six hundred members who sit in the House of Commons of England, the members of the House of Lords, and we believe the governing councils of most or all of the cities, still do, or until very recently did, serve without pay. In America the national Congress, thirty-nine state and several territorial legislatures, and the common councils of most of the cities, comprising probably 5,000 persons, draw regular salaries. In England thirty-five judges of the courts of record seem to have performed the general and appellate judicial work for 28,000,000 people. We have no similar number of people, among whom the performance of judicial work does not call for the services of a number of judges, at least ten times as large. Republics are generous in expenditure. No throne-room in Europe, it is believed, costs more than the chamber of the New York councilmen. No palace or public building, for representing the dignity of an equal number of people, equals in expense the state capitol at Albany, or that at Springfield, Ill. The most virtuous and meritorious quality, in the practical working of a republican government founded on manhood suffrage, when brought into comparison with governments professing to represent wealth, land, religion, the army, or other special but powerful interest, is the largeness numerically of the class to which it tries to do the greatest possible good. It may still continue exclusive toward any non-voting class, or despotic toward any class which is sure not to come into potency as a constituency. It is nearly certain to do far more for education, for the dependent, defective, and delinquent classes, for the general promotion of industry, and probably to make more public improvements, than a government which arises out of a condition of industry wherein the voting constituency is more narrow in relative numbers. It will tax capital if it can, and so far as it can, rather than labor. There is great breadth of purpose, and in general a shrewd perception of the drift of the popular weal, as well as wishes, in American politics. In the politics of republics which have a less ample treasury of national earnings to draw upon, the economic results must be less brilliant. The anticipations of the founders of the American republic have not been fully met in several respects. They did not suppose that success in obtaining office would depend so much more on skill in manipulating the machinery of selecting candidates for office, than on skill in performing the duties of office.

They did not desire so frequent a displacement, of one inexperienced officer, by another equally inexperienced, as often occurs.

They did not foresee the costly political convulsions of the first magnitude, and consequent incurment of expense for armies and navies, which, when spread over the intervening years, would render the military expenses of an unarmed republic fully equal to those of any armed empire.

Questions which it was hoped to submit to the arbitrament of the whole people, or, if of a few, at least of a well-selected and highly intelligent few, seem often to turn on political accidents, in far out-of-the-way constituencies of small intelligence. The question whether Hayes was elected turns for the moment on the point whether a negress named Eliza Cranston, in an obscure parish in Louisiana, speaks the truth. Accidental segments, insignificant fractions, and small self-constituted and self-seeking coteries of party conventions of manipulators, remind us by their vehemence and power, that temporarily the pyramid of state rests on its apex. The few who control are too accidental, too uninformed, too untrustworthy and too extra-hazardous, to deserve to have such a load of responsibility thrust on them.* An aristocracy that becomes such by commanding armies or by acquiring lands, is not, in the long run, inferior to one that becomes such by skillful management of primary conventions. In adjusting the slavery question by popular convulsion, instead of, as in Russia, by executive discretion,† the American Republic has shown that where a very large number of the people are interested in an evil, a government wherein the initiative may be said to spring from the common people, and go upward, may be less awake to the demands of economic, ethical, and moral progress than one in which a single enlightened ruler may enjoy an absolute confidence and unchangeable tenure of power.

---

* Upon this, Mr. de Tocqueville, in his "Democracy in America," remarked: "In the immense crowd which throngs the avenues to power in the United States, I found very few men who displayed that manly candor and masculine independence of opinion which frequently distinguished the Americans in former times, and which constitutes the leading feature in distinguished characters wheresoever they may be found. It seems at first sight as if all the minds of the Americans were formed upon one model, so accurately do they follow the same route. A stranger does indeed sometimes meet with Americans who dissent from the rigor of these formularies, with men who deplore the effects of the laws, the mutability and the ignorance of democracy—who even go so far as to observe the evil tendencies which impair the national character, and to point out such remedies as it might be possible to apply, . . . but . . . they hold a different language in public."

† *Vide* "Russia," *post*, § 594, Ch. XIII.

The feature which is most original and admirable is equal representation of population according to numbers in the House of Representatives, and of large and small States as equals with each other in the Senate. This has introduced into the United States Senate a spirit whose aim is to temper power with equity. It has been, at most times, the ablest because the most equitable deliberative body in the world. The British House of Lords might be restored to vitality by such a federation of the empire as would embody in it something of the dignity of the American Senate. Capital might be represented in it more perfectly than now, and in addition the various states and dominions, now governed by Parliament.

168. Diversity of Functions and Objects.—Governments are further classified as either military or civil, provisional or permanent, constitutional or absolute, of mutual checks and balances or sovereign in some one department, tributary or supreme, temporal or spiritual, religious or secular, general or local, centralized or distributed (decentralized).

An absolute government has some one department, or body, which possesses at least legislative omnipotence, and which, in the last resort, can effectively control all other departments. In this sense, Great Britain is an absolute government, and its parliament possesses legislative omnipotence, in itself, and final absolute power over all other departments. It can declare the throne vacant, as it did on the occasion of the forced abdication of James II. It can change the succession, as it has done on several occasions, electing a new family to reign, and prescribing a new order of inheritance for the crown. Doubtless, on what it deemed a sufficient provocation, or reason, it could terminate the heritable quality in the crown, and make it elective. This would be styled, in English parlance, a revolution, and a change in the fundamental law. The English parliament, however, has the power to change the fundamental law by which it is bound, and this makes it absolute, or a law unto itself. It has power to impeach, and execute, all judges who should oppose its will, as well as all ministers of the crown who should nullify its laws or disobey its commands. The proceedings of the Long Parliament, and of the Protectorate under Cromwell, including the execution of Charles I., are, out of deference to the kingly principle, usually assumed, in English discussion, to be unconstitutional and revolutionary. They were, however, assertions of the practical omnipotence of parliament, which underlie and cause the present supremacy of the House of

Commons. Without these, and the subsequent parliamentary revolutions, it would not to-day be the theory of the English government that parliament is supreme over the crown, and that in parliament the House of Commons is supreme over the House of Lords. Still, the particular machinery through which the Commons assert their supremacy, over other branches of the government, is that, by means of the principle of responsible government, the House of Commons controls the ministers of the crown, and, as these have the power at all times to appoint new peers, they can at all times, through the appointment of new peers, control the House of Lords.

The United States, on the other hand, is a government of mutual checks and balances, or wherein absolute sovereignty is not lodged in any one department, but each may check the other.

The departments for this purpose are (1) the executive, of which the President is chief, and which includes the cabinet and all subordinate officers (about 120,000 in all) of the civil service, the diplomatic officers and consuls, the army and navy ;

(2) The legislative department, consisting of both houses of Congress ;

(3) The judiciary, comprising all the federal courts, viz., the Supreme Court of the United States, circuit courts, district courts, territorial courts, court of claims, and courts of the District of Columbia.

The executive, legislative, and judicial departments act as checks upon and balance each other in certain ways. If the executive and Congress are dissatisfied with the workings of the Supreme Court they have the power by law to reconstitute the court, expand or reduce the number of judges, and, in case it is expanded, the President has power by the selection of the added judges to determine the political complexion of the court, and in some degree the quality of its judicial decisions upon the class of legal questions he has in mind at the time he makes the appointment. Action of this kind is held in disfavor, however, as large numbers of the people regard the Supreme Court as a body that should not be subordinated to the views of the President and Congress in its judicial decisions, even where they bear in their effect upon the political departments of the government.

The two houses of Congress have also the power to impeach and remove either the President, or the judges of the Supreme Court, for high crimes and misdemeanors.

The Supreme Court has, by judicial construction, in consequence

of the existence of our written Constitution, a power to declare an act of Congress, regularly passed, null and void, if it holds the act to be in conflict with the written Constitution. This is a power not possessed by the courts under any other form of government, unless it may have been copied, from ours, into the constitutions of some of the Spanish-American states.

The President, through the veto power, can check any action of Congress not capable of being passed by a two-thirds vote over his veto. In practice, each of the departments of our government has, at times, exerted a powerful check on the action of the others.

The distinction between temporal and spiritual government is essential to a clear view of the science of comparative government.

A government is temporal if it has charge of the bodies, properties, and legal rights of its subjects, with power to inflict corporal and pecuniary punishments, and to regulate the transfer and descent of property. Such are the governments of England, France, Italy, and Spain.

It is spiritual, if it have charge of the consciences of any class of subject persons, with a purporting power to dictate to them what is right and what is wrong, or what will make for their supposed welfare in a present or a future world. Such is the government of the Pope of Rome, of the Patriarch of Constantinople as the head of the Greek Church, and of the Czar of Russia as the competing or antagonistic head of the same Greek Church. Such also, under the Mohammedan faith, are the Sultan of the Ottomans, and the Sheik ul Islam of Mecca.

In England spiritual and temporal powers combine in the queen. In Germany, they unite in the emperor. In Spain, Austria, and Brazil, the Spanish-American republics, and all the harmoniously Catholic countries, the temporal power is in the state, but it acknowledges the spiritual supremacy of the Pope of Rome.

In France the republic is a secular republic, entangled with the embarrassments growing out of a former union between the monarchical state, to which it succeeds, and the church.

In the United States the distinction between temporal and spiritual powers does not exist, but the federal and state governments are secular, exercising no influence whatever over religious affairs, and no such thing as a spiritual government is recognized by law. Secular and religious government are distinguished in

the United States as follows: A state is secular, when it identifies itself with no religious faith of any kind as a state, but leaves its citizens and its officials, when acting in their moral capacity as individual persons, free to perform or neglect, to observe or to avoid, any and every religious duty or principle as each person shall for himself elect. In the United States, therefore, all religious organizations are simply private corporations which are permitted to exercise a merely persuasive and not in any degree a coercive power. Nor could a coercive power be conferred upon them, by the consent of their members, which would not be rebuked and set aside, or punished, by the civil courts.

General and local government are distinguished as follows: General government consists of such of the functions of government as are exercised by the same authority, according to the same rules, and by persons selected in the same general manner, for extended areas of country and large and widely separated and numerous populations. Local government consists of such of the functions of government as are permitted to be broken up, subdivided, or "morselized," so as to be exercised by diverse authorities, by officers selected according to different rules, and acting in diverse ways in different parts of the country.

169. Local Government.—All the subdivisions of government, according to their form, which have been heretofore named, whether as monarchies, aristocracies, democracies, or republics, whether as bureaucratic, hereditary, or imperial, whether as responsible or of fixed terms, whether as parliamentary and absolute, or of checks and balances, whether as despotic or free, whether as temporal or spiritual, religious or secular, have had reference to the general government. The general compares with the local government as the spires, domes, towers, and loftier architectural features of an edifice, as seen from without, compare with its inner apartments, its parlors, kitchens, sitting-rooms, and conveniences for home life. The comfort of a people dwelling within an edifice may depend more on the mode of getting the kettle over the fire, or ventilating the sleeping-rooms, or expelling flies from the larder, than upon the question whether a tower is true Gothic, or a pillar is absolute Corinthian. So the amount of real liberty and prosperity enjoyed by a people may depend chiefly upon the administration and form of the local government, which lays out roads, builds bridges, schools, and sewers, docks, markets, and baths, provides gas, water, and paved streets, licenses street railways, cabs, and carts, and also trades

and amusements, lays out parks, opens public libraries, regulates health, buries the dead, and feeds the homeless poor, and which, in some countries, lays out farms as well, and divides their produce among the workers, or collects their wages, or shuts out or licenses alcoholic drinks.

Local government gets nearer to the people in many things than general government, and may be of a very unlike character to that of the general government. In Russia, for instance, each *mir* or village commune is a little communistic democracy, in which no peasant can lose his title to his home, while in Ireland each landed estate is a little absolute despotism, in which nothing but a revolution could insure to the peasant his home against his landlord. Thus the freer character of the general government, in England, is a less valuable boon to the Irish peasant, than the freer character of the local government of Russia is to the Russian peasant. Hence, in estimating the relative freedom, and effects upon industries, of various governments, it is more important to look at the substance than the form of all governments, and to look at the mode in which the local rather than the general functions are administered.

In the United States general government is not confined to national government, nor are local functions strictly identical with state, city, and county functions.

So far as the national government runs a post-office, lighthouse, harbor, court, revenue, or customs office, in a town, that becomes local government within that town. All governments, therefore, have some local functions. In the United States, however, most of the functions of local government devolve on States, counties, and cities. Their economic influence is felt chiefly by the action they take, or omit taking, concerning :

1. The opening up and surveys of new lands, and the denudation and restoration of forests, destruction of animals, etc.

2. The construction of highways, roads of all kinds, including railways and canals, the building of aqueducts for cities, the improvement of rivers as highways, protection from rivers, and irrigation.

3. The construction of residences and their insurance, including in cities the regulation of their materials, height, kind, and quality.

4. Creating, registering, and vindicating titles to land, including the regulation of transfers and descent of lands.

5. Their protection to personal liberty and to the security of the

family relation, to freedom of contract and association, and their provisions as to corporations and trades.

6. Their provisions for education, and the quality of the education they impart.

7. Their provision for the relief of the poor, the maintenance of the incompetent, defective, and delinquent classes, and detection and punishment of the criminal classes, including prisons, and colonization.

8. Their action as respects vice and intemperance, food, drinks, popular amusements and public morals, including in cities public parks, libraries, fountains, and baths.

9. Their methods of taxation and theory of the purposes to which it is adequate.

10. Their provisions for rewarding discoveries in science, inventions in the useful arts or masterpieces in fine art, and for granting by letters patent to inventors and by copyright to authors the monopoly of the profits accruing upon their works for a period of time.

11. Their provisions as to coast and naval defences, armies, police, and such coercive means as may be essential to the permanence and good order of the State.

170. The State as Related to Industry.—In estimating the relation of governments to industry, especially with the view of determining whether the aggregate experience of mankind goes to show that the functions of government are alike in all states or different in each, and whether they have been injuriously or beneficially exercised, it is important first to grasp in their entirety all the functions of all parts of the government, of the local as well as the general, the colonial as well as the home government, and of the army as well as of the tariffs.

No assumption is more frequent, in economic discussion, than that England not only practices, but stunningly illustrates, free foreign trade. No fact has entered so prominently into modern history as that England has constantly made use of her armies in India, Ireland, Turkey, Egypt, Africa, New Zealand, Borneo, China, Japan, and among all barbarous peoples, to coerce foreign trade, or, as she expresses it, to "open barbarian ports to civilization." If one nation practices military protection on behalf of her foreign trade, the result may be as efficient, in its way, as another nation, differently situated, may achieve, by practicing tariff protection in favor of its home trade.

As the Roman empire was circumstanced, the building of great

roads, all centering in Rome, may have been the most efficient form of protection to a state whose chief industry was military conquest.

In the modern British Empire, on whose dominions the sun never sets, lines of steamers and coaling stations may take the exact place, and perform the precise function, of Rome's great roads. In the Middle Ages, when money was scarce and production reduced to a low stage, the owner of land, seeking security against the marauder, would beg to become the vassal of a ruthless baron in order that he might exchange weakness for protection, and would pay rent in military service, of course neither for capital expended, nor for fertility, nor for location, but for security. But he would consult his own best interests at the time, as certainly as he did later on, when money became plenty, in commuting his military rent into a money rent.

The exterior or visible government of society, known as the state, must, however, always be recognized by the student of economics, as a sort of apparel thrown over that real and involuntary organization of society, under industry, which may be called the industrial state.

The industrial state has a different set of chiefs, or heads, from the civil state, whose ascendency is indicated only by the rate of remuneration they can command, the quantity of capital and labor they can control, and the quantity of business they can transact at a profit. Voting is performed in the industrial state every time a contract is made, merchandise is transferred, or a commodity is created. An employer says: "I will give you $20 per week; will you work for me?" The employee says: "I will." Thenceforth both are integral units organized into one larger body—society. One commands, the other obeys. One steers, the other rows. One sells his time for wages, the other sells what this time has aided to produce—the product, for profit—if he can. If he can not sell it, having produced something not wanted, his steering capacity is cut down, and lessened, by the fact that he has lost a part of that capital in right of which, alone, he does the steering. Every time, therefore, a retailer says to his customer, "Will you buy," and the customer says, "I will," the retailer is promoted or approved in his office, as, by his customer's vote, that he has usefully supplied a demand. Thus the organization of the industrial state is, at once voluntarily and involuntarily, extended every time a purchase is made or a business act performed. The customer's act elects the retailer. The retailer's act elects the whole-

saler. The wholesalers elect the manufacturer, and the manufacturer must foresee the demand correctly, or part with his capital. The employer's choice elects the workers, and the workers are relieved of the necessity of watching the markets of the products of their labor, and need only watch the markets of labor itself. As votes in the political state give the title to office, so capital in the industrial state, which can only be preserved by success, gives title to command. Every capitalist can command all the labor he chooses to pay for. By simplifying their task, to the single one of selling their labor-time and labor-force to whoever will pay the highest price for it, laborers are enabled to give far more time and force to the work actually to be done. By simplifying the retailer's task to the single one of buying at five what he can sell for seven, the retailer saves all his time and force for efforts which have profit in them. And by the conjoint action of every member of society, in the line in which he can be paid, and in no other, he most closely serves demand, which is the most comprehensive name for human need, or for the relief of want. Thus, in the industrial state, the higher and more intense is the egoism or desire of profit, as the motive of human action, the prompter and more efficient is the satisfaction of demand, the relief of want, or the attainment of practical altroism as the effect.

The political state is the garment, or apparel, of the industrial state. Governments are but the expression, for coercive or attractive purposes, of the interest and will of society, as it is formulated by their material condition and occupations. Where the masses of the people have the means of comfortable living, by nearly continual labor (and without the continual labor of nearly all it is impossible, in the nature of things, that any should live comfortably), there, persons will be free ; governments will rest lightly on the shoulders of the people. But little coercion, either by governments or by employers, will be required, and both government and industry will become attractive rather than coercive.

171. Coercion and Attraction in the State.—The attractive functions of government, as distinguished from its coercive, consist in the education of youth, the establishment of lighthouses and life-saving stations, the distribution of seeds to secure the introduction of new branches of agriculture, the creation of artificial corporations, having perpetual life, as a means of attracting the capital of investors into investments of a perpetual character, the building of levees to restrain floods, and of canals,

works of irrigation, and aqueducts, and building or aiding railways, common highways, sewers, drains and bridges, the authorization of banks for the issue and loan of credit-money, and of savings banks for making the hoarding propensity in the poor productive ere yet the accumulation is large enough to be used as a working capital ; enacting laws of descent, whereby human affection and love, in one generation of workers, may be attracted onward in their toil, by the hope of being able to make provision for those they shall leave behind ; authorizing the creation of insurance companies and trust funds, for tiding over the calamities of fire and death by the interested co-operative aid of those who do this good to others, on a bargain that others shall pay them for the service ; the regulation and check of international competition in industries by tariffs ; the diversification of industries by securing certain valuable markets to producers, the establishment of colleges, the propagation of fish in rivers, the tunneling of mines on occasions when individual enterprise might neglect a much-needed work, the attractively encouraged emigration of the poor to new and better homes, the collection and universal diffusion of an accurate bulletin of the weather one day in advance, the assortment of letters for transmission by routes selected and paid for by the government, the granting of patents to inventors, and a hundred others.

This enumeration might be extended, but it suffices to show how vastly, in modern government, the *attractive*, or *educing*, or educating, functions of government have risen above and come to outrank the coercive. In most of the Northern States of the Union from two-thirds to three-fourths of the revenue of the State is expended on the single purely attractive function of educating youth, a function which, until barely a century ago, it was not supposed that government had anything whatever to do with.

With the advance of government to functions more and more attractive, there has been a recession, in all newer and freer countries, from the despotic, military, and coercive functions, to which government was formerly confined. Where, a century ago, 134 crimes were punished with death, now only from one to four are so punished. In America, and the British colonies, standing armies and coast defences are of the past. Titles, the survival of military rank and soldierly life, are fading out and less esteemed. Finally there is a growing feeling that woman, debarred by her sex from founding the coercive or military state, except she offer

herself for military service, is not by the same logic barred from taking part in those functions of government which are intellectual, moral, and attractive. The earliest, and perhaps, next to education, the most important instance in which government has passed from coercive to attractive functions has been in practicing protection to national industries against foreign competition.

172. Government by Force. Voting by Males.—The coercive functions of government bear toward the attractive much the same relation as coin bears toward credit money. Had there never been government by coercion, a government by attraction could not have arisen. The tramp of contending armies precedes respectful obedience to the law and the courts. The memory of hostile encounters overshadows the courteous language of diplomacy, and gives efficacy to arbitrations. It is a fundamental maxim that "the law always implies force." All government implies an army, navy, and police capable of enforcing its will. In fact all governments have been established, as against those who opposed their establishment, by armed force. The summary manner in which the Tories, who opposed in New York, New Jersey, and elsewhere, the formation of the American Government, were driven out of the United States, as fugitives, places the United States in the same category as all other governments in this respect. The "Continental Congress" met, not to deliberate with Tories as to whether it should itself exist, but to deliberate among Whigs, and as a purely Whig government, how all opposition to itself could best be forcibly overcome. As armies are the immediate authors and sponsors of all government, whether republican or monarchical, it is natural that, when voting comes to supersede fighting as a means of selecting the officials who are to govern, the voting should devolve exclusively on the sex which had done the fighting. This alone, and not any difference of intelligence between the two sexes, has caused the male sex to monopolize the right of suffrage.

In Sparta, and one or two other of the States of Greece, according to Aristotle, women bore arms in war, owned most of the property, and voted. In whatever state they should be admitted to vote it would logically and naturally follow, if not at first, yet in the long run, that they would bear arms also, if only from a sentiment of honor. For as women are far more exacting than men in their standard of requirement as to the number of supposed good objects the government should be called on to effect, they would constitute the class of voters most given to enacting

high-keyed, reformatory, and exacting laws, which would raise the number voting against them to close proximity with the number voting for them. Such laws, which are barely passed by a small plurality of votes, and which imply a large interference with the personal liberty of many citizens, of perhaps the poorer class, excite a degree of opposition to their enforcement which the ordinary laws against crime do not arouse. The difficulty of their enforcement renders much personal collision necessary, and in such case somebody must give and take the blows, or the enforcement of the law would be abandoned.

In a state in which women should vote on equal terms with men, the laws would soon come to be divided into those which bore the general sanction of both women and men, and those which sought to press the magistrate's club into the work of enforcing as law the finer sentiments of chastity, temperance, purity, and religion, which men are content to remit to the domain of morals and persuasion.

In this manner there would be two kinds of laws, the men's laws and the women's laws. The former would be enforced; the latter would not, unless women should take it upon themselves to do so. To remit these laws to mere persuasion would leave them just where the sentiments they embody are now. The attempt of women to enforce them would convert them, as a logical corollary, into an arms-bearing sex. That the female sex would accept the right of suffrage, if accompanied by the condition that they bear arms and perform police duty, is hardly contended. It is doubtless the opinion of the great mass of women, that no exigency of their situation calls for action so revolutionary, and, to nearly all of them, so distasteful. The exclusion of women from the right to vote can only be logically ascribed to the fact that governments are an affair of armed force, in which it is contrary to the course of nature and civilization that woman should participate.

This monopoly of the fighting function by the male is, in its turn, an evident consequence of the physiological necessity that motherhood shall be made secure, and motherly attention adequate in delicacy, to the needs of infancy. The germs of this division of functions between the sexes appear in nearly all of the higher forms of quadrupeds and birds, and are wholly absent only among reptiles and fishes. A division of functions between the sexes which is so much broader, even, than the human race, and so much older than history, is not likely to become capable of over-

throw in fact, however interesting may be the grounds on which its obliteration is pressed.

173. Armies, and Their Cost.—In ancient times, war was a struggle between all the members of two hostile populations. In modern times, the principle of division of labor is applied to it. It is a physical fight only between the two organized armies in the field ; the populations on both sides take part in it only as tax-payers, or as their transit and trade may be interrupted, or as they are recruited, drafted, or enlisted into the army. Armies are now recruited by two modes—voluntary enlistment, and the draft. Great Britain adheres to the former system, which in practice usually degenerates into an abuse known as the press-gang—a dozen armed men setting upon one, and compelling him to "voluntarily enlist," either through the blandishments of intoxication or the force of a sound drubbing. Blackstone, a century ago, denounced the press-gang as unworthy of a free country. Either it, or very high bounties, are necessary under the system of voluntary enlistments.

It was by the conscription, or drawing among all citizens by lot, that Napoleon was able to sustain the arms of France against the Allied Powers from 1793 to 1815. It has since been adopted or revived in all the European states, and was resorted to by the United States in its war of 1861 to 1865.

The relative economy of the policy of maintaining a large army, or a small one, is not so simple a problem, since the war last named, as it had previously been assumed to be, by many advocates of the doctrine that "that government is best which governs least." In 1790, Congress fixed the rank and file of the American army at 1,216 men. In 1814, a small English force of only 3,500 men was able to seize and burn the Capitol and the city of Washington, though the country had then a population of 8,000,000 persons, or about as many as Egypt contained when, under her first great military leader, Sesostris, she extended her empire over Ethiopia and Southern Asia, eastward to the Ganges, and northward to the Caspian.

During the war of 1861-5, the government of the United States called under arms 2,759,049 men, of whom 2,656,053 men were actually embodied in the armies. Adding to these the 1,100,000 men embodied by the Southern States into their armies, the total force called into the field, in a country whose hobby it was to have no armies, amounted to the enormous number of 3,756,053 men, whereas the entire standing armies of Great Britain,

France, Germany, Russia, Austro-Hungary, and Italy combined, when on a peace footing, amount to only 2,265,000 men, their active army during war to only 5,101,000 men, and their entire nominal forces, including their active army, depot troops, garrisons, and reserves for 244,000,000 of people, sum up to only 6,470,000 men, or but fifty per cent. more than the United States actually mustered into the field in five years. The entire annual expenditure of these six leading nations, on their armies, is £96,000,000,* or $480,000,000, an expenditure about half as great per day as that to which the United States alone was subjected during the greater part of the war, and the total of which, for twenty years, would be required to pay the cost of the American war ($9,000,000,000) † for five years. The military expenditure of Great Britain is $3 per head per year, for the population of Great Britain and Ireland, or one cent per working day, being about one-sixth the cost of intoxicating liquors. The military expenditure of France is 10*s.* sterling (about $2.50) per head per annum, or about two-thirds of a cent per working day. That of Germany is fifteen and a half millions of pounds sterling ($78,000,000) for 41,000,000 of people, or say one-half cent a day for each person. That of Russia is $1.25 per capita per year, or one-third of a cent a day. And those of Austro-Hungary and Italy are about the same. Since the war of 1861-5, the American expenditure, per capita, for interest on the war debt and pensions, about equals the European rate of expenditure per capita for standing armies and interest.

It cannot be assumed, therefore, that the American experiment, of dispensing wholly with a standing army, has proved economical to American tax-payers, unless it be also assumed that the maintenance of a standing army would not have prevented the war for secession in 1861-5. It is difficult to imagine, however, a government having 100,000 armed men at its command calmly waiting until eleven States had, one after another, met in their legislative sessions, and resolved to withdraw from the Union, when a single regiment of obedient troops would have proved competent to disperse, or place under arrest, either of these bodies. Since 1860, the United States, as an integral state, indissoluble at the will of any one or eleven States, owes its existence to the army it was able to create. The collision between Germany and Austria, ending at Sadowa, and between Germany and

* Encyclopædia Britannica. † Estimate of David A. Wells.

France, terminating at Sedan, have converted Prussia into a German empire founded chiefly by an army. The kingdom of Italy under Victor Emmanuel, is an army-made kingdom in effect --the irregular bodies of carbonari and lazzaroni, under Garibaldi, counting for an army because of the absence of any effective opposition. England's rule over Ireland and India rests on military force, more or less nascent, and hence, in her reign over 200 out of 225 millions of her subjects, England is an army-made state. Russia, Austro-Hungary, and the Ottoman Empire do not aspire to be other than army-made states. Hence, in the industrial sense, armies may be defined as the factories which take in races, quarrels, and superstitions as their raw material, employ soldiers as their working operatives, make use of money, credit, taxes, loans, guns, powder, ships, and shells, as their circulating capital, and turn out states, empires, and republics, and indirectly popular elections, settled constitutions, legislatures, laws, courts, and political and civil order, as their finished products. They stand in the same relation to the states which they establish, as strikes and lock-outs do to the subsequent rates of wages. Army expenditures, therefore, stand on the same footing, economically, as expenditures for education, for elections, for courts of justice, and the punishment of crime. They have been classed, by many economists, as wholly unproductive, or as simply destructive.

When viewed in perspective, over long distances of time, they often seem more productive than periods of peace. The treasures of gold and silver, obtained by Alexander from the hordes of Eastern princes, introduced money in Western Europe. The conquests of Rome were missionary in their effect. Many modern wars have directly produced the most wide-spread industrial benefits. No feature in economic history is so difficult of accurate adjustment as that of the relative cost of wars and of armies,*

---

* *Col. Colley*, professor of military administration at Sandhurst, writing in Encyclopedia Britannica on "Army," says of military expenditure: "Perhaps it might more fairly be called indirectly productive, as necessary to the maintenance and extension of civilization, and the production and development of trade. Further, the value of property increases with increased security, and military expenditure within certain limits thus tends to repay itself. Broadly, however, it may be treated as a tax for insurance, and as so much withdrawn from the productive power of the nation. The object of all military institutions is to develop the highest fighting power—that is, to attain the greatest security with least strain on the industry of the country—the latter being measured not by the cost of the army, as shown by the budget, but by the amount of productive labor withdrawn and disturbance produced. All questions, therefore, have to be considered under two aspects, military and economical—that of efficiency and that of cost."

of navies, and fortifications, as compared with the often more costly experiment of attempting to dispense with them, or of failing to maintain them with adequate vigor.

Peru, for many centuries a cultivated, aristocratic, populous, and wealthy country, inheritor of the pride of the Castilian and of the sources of the wealth of the Incas, accustomed to despise the base-born and grovelling Chilians as a coarse, brutal, and half-savage nest of mountain starvelings, has within three decades past been reduced to a bankrupt and subject province, the prey of the cruel savages it had despised.

History is full of melancholy proofs that agriculture and commerce, banking and exchange, manufactures and finance, all derive their liberty to exist in peace and security, either recently, presently, or prospectively, from the soldier. After all is said, that can be, in favor of holding the military power at all times subordinate to the civil power, the historic fact remains that the civil power owes its existence to the military, and, if adequately resisted, falls back for defense upon the author of its being—the army. In this last resort the productive power of the state, in its totality, becomes bound up in, and is dependent, upon its military power.

174. Crime and Its Punishments.—Crime is little else than a continuance, by sporadic individuals, of that warfare against order, which, if carried on by organized bodies of men in military array, is called war. It consists in gratifying our desires by the commission of acts which the state condemns and punishes. In the United States about 30,000 convicts, in the penitentiaries, attest the fact that, in the most favored industrially of nations, about one in 2,000 of the population is a criminal. Owing to the very large number of criminals that escape punishment, the proportion of those who at times and in sudden heat, as well as professionally and as a settled business, make war on society, is somewhat larger. There are also 11,000 lesser culprits.

The state does not punish, primarily or chiefly, to reform the criminal, but to protect itself, and preserve that order, without which there could be no productive industry, or settled liberty. No ethical perfection can be claimed for its statutes or decrees, whether executive, legislative, or judicial.

Its right to govern does not depend on its governing always rightly, since that would be to require infallibility from the fallible, and since no other criterion more wise than the state itself can be found to determine whether it is right.

> "No thief e'er felt the halter draw,
> With good opinion of the law."

Except as the minority, which has to be overruled in all government, may agitate with the view of converting itself into the majority, and so becoming in fact the state, the opinions of such minority are practically immaterial. The state is therefore as wise, as just, and as humane as the aggregate opinion which goes to make up its decisions, and no more so. It expresses a grand average. In the view of later or distant peoples, a state may itself commit great blunders, crimes, and inhumanities, and in no sphere is it more possible to do so than in its punishments of crime. In its own view it can not err, because there is no criterion by which to adjudge its action to be error, unless it may be the very flimsy criterion of popular clamor. But a clamor may be raised as easily when the state is right, in the judgment of its best minds, as when it is wrong. For popular clamor also has its errors and its crimes.

Crime is at bottom a problem in economic science (as well as in moral) for four reasons, viz.:

1. Men, in most cases, become criminals only as they fail in productive industry.

2. In a like vast majority of cases their reform can be best effected, if at all, by improving their facilities for making a living honestly.

3. The modes of punishment usually adopted eliminate the criminal, temporarily or permanently, from among industrial producers, and render him a burden on them.

4. Crime itself is, in most cases, an attempt at a redistribution of wealth, power, or privilege, in a manner which assumes that the criminal will not abide by the mode of economic distribution brought about by natural and social law. He is not content with his own.

M. Quetelet* took a less economic view of crime, but while he compared crime with age, sex, occupation, education, geographical districts, etc., he neglected to compare it, systematically, with mere poverty. Of course he could not find a correspondence for which he did not look. After noting that instruction has less influence than is generally supposed, and that instruction which consists only of reading and writing, to the neglect of morals, may become a new instrument of crime, he says: "The same is true of poverty.

---

* "Recherches sur le Penchant au Crime." A. Quetelet, 1833.

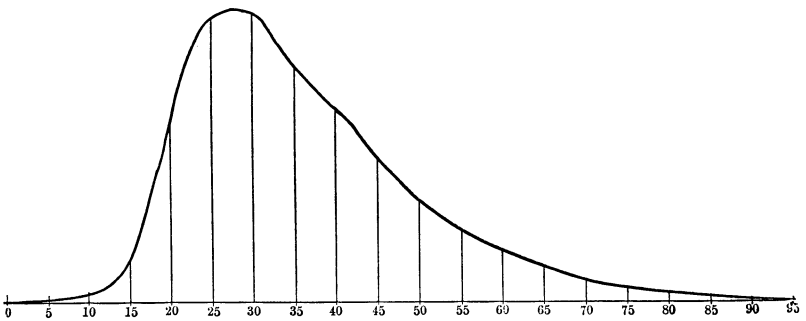
Most of the departments of France, reputed the poorest, are at the same time the most moral. Man does not generally resort to crime because he has but little, but rather when he is suddenly reduced from a condition of ease to one of distress, and of insufficient means to gratify his accustomed wants." M. Quetelet's specification does not completely justify his position. The poorer districts of France might be more moral than the richer, and yet if the immoral class, in these districts, were all the poorest class, it would still establish that their immorality, and their poverty, were either due to each other, or to like causes. The comparison must not be made between districts, but between the richer and the poorer population of any one district. The comparison (cited *ante*, ch. 1, § 15, of this work) in the case of Austria would be duplicated in any other country in which the statistics should be collected. It would be found that the trial and punishment of well-to-do people, for crime, is so rare as to prove that crime stands chiefly related to poverty.

M. Quetelet says, as to the sexes, in France, "that only one woman, to four men, comes before the tribunals." This proportion of females is larger than in America; but, even in America only one woman, to four and a half, makes the struggle for subsistence in person, by engaging in an industrial occupation. In a visit to the penitentiary at Joliet, Ill., the writer observed that there were but thirty women to 1,500 men.* But it may be doubted if in Illinois the number of women who make the struggle for subsistence, wholly unaided by any male protector, exceeds one in fifty.

M. Quetelet found that both in warm weather and in warm climates, as compared with cold, crimes of violence and against persons prevail, but that in cold weather, and in cold climates, crimes against property multiply. He found that the country in which there are most frequent changes, and the greatest admixture, of population, in which industry and commerce bring people into most active collision, and persons and property circulate most actively, and in which there were greatest inequalities of fortune, there was the highest ratio of crime to population. The higher the rank of society, and grade of instruction, the less the culpability of women relatively to men, and the lower the rank the less the moral differentiation between the two sexes. The liberal professions tend toward crimes against persons more than to those

* Census of 1880 makes it 1487 males, 23 females.

against property; the *ouvrier* (wage-workers) and servile class tend most to crimes against property. So far as women are in a condition of dependence, lead sedentary lives, or are physically weak, their proportion of crime is diminished. The impulse toward crime was strongest in the period of the culmination of physical strength and animal passion, declining after the age of twenty-five in the ratio shown in the diagram.



RELATIVE TENDENCY TO CRIME AT DIFFERENT AGES.

In America the period of epidemic absence of crime was simultaneous with the like absence of bankruptcy, viz., during the war of 1861 to 1865. In many counties in every State the jails were continuously empty for long periods, so that it attracted the comments of the courts. The war seemed to exhaust the crime propensity by its intense demands for slaughter, and all minor strifes lacked the passion to fan them into crime.

M. Quetelet concludes his researches by expressing his "astonishment at the constancy which we observe in the results which each year appear in the records of the administration of justice. Nothing, at first blush, ought to be less regular than the march of crime. Nothing, above all, ought more completely to defy human foresight, than the number of murders which would arise without provocation, and in encounters altogether accidental. Nevertheless experience proves that not only murders are annually nearly the same in number, but that the instruments which serve in their commission are employed in the same proportions. Thus is presented to us the same sad perspective of the reappearance of the same crimes in the same order, and assuming in minute detail the same form. Sad condition of the human race—the portion due

to the prison, chains, and the scaffold, seems as fixed as the revenues of the state." *

In the very earliest condition of society, crime, as distinguished from the disobedience, by the slave, of his master's commands, could hardly be said to exist. Crime is the offspring of liberty, as is also virtue. The tendency of earlier society was to punish crime by expulsion or extermination—vindictively. Exile to an island is mentioned in Job, and appears in the earliest Roman law. Labor in mines, and slavery, took the place, until a recent date, which is now held by penitentiaries and jails. Forfeiture of goods, and, in a few cases, of land, branding and slitting the ear, maiming and torture, crop out in history as expressive of the sense of social justice toward crime. Throwing from the Tarpeian Rock, casting among lions, the drinking of poison, beheading, crucifixion, and burning are prominently brought to view in ancient and medieval history, while hanging is recent.

In administering the death penalty, no account is usually made of the value a man may still be capable of conferring on society, notwithstanding the commission by him of a very great crime. Common rumor reports Shakspeare as having incurred the death penalty, for poaching, before he had written any one of his plays or poems. Had the law been executed, in his case, the human race would have suffered an immeasurable loss. Jeremy Bentham assails vigorously † what he calls the "lavish and unnecessary use that is made of the invariable, unequable, incommensurable, uncharacteristic, unfrugal, unpopular, uncompensatory, irremissible punishment of death." Since his day the number of crimes so punished has been reduced from 134 to 4, of which the latter all involve the taking, or endangering, of human life.

The most successful treatment of crime in modern history, and

* Note (in French) from Quetelet:

	1826.	1827.	1828.	1829.
Meurtres en général	241	234	227	231
Fusil	47	52	54	54
Pistolet	9	12	6	7
Sabre, épée, et autres armes permises	8	2	6	6
Stylet, poignard, et autres armes prohibités	7	5	2	1
Couteau	39	40	34	46
Bâton, canne, etc	23	28	31	24
Pierres	20	20	21	21
Hache, fourche, et autres instrumens tranchants ou piquans	13	20	16	14
Marteau et corps coutoudans non autrement designées	22	20	26	31
Strangulations	2	5	2	2
En precipitant ou noyant	6	16	6	1
Le feu		1		1
Inconnus	17	1	2	

† "Bentham's Works," by Bowring, vol. 1, p. 186.

the only treatment that could be called economic or reformatory, is the colonization of the criminal, as practiced by England, indirectly in America, and directly in Australia, the Cape, New Zealand, and Tasmania. Notwithstanding all the efforts which philanthropists have made to bring reform out of the penitentiary system, the admission of practical prison workers is that the system almost never produces penitence. It fails to recognize that most men become criminals, not because increased restraint and a close fitting "jacket of the law" is what they need, but because the degree of restraint and jural limitations they are under in civilized life, and in a state of liberty, is greater than their natures are adapted to. A society more relaxed, with fewer restraints and greater self-dependence, is furnished them by colonization, and, in many thousands of instances, the transported convict in a few years becomes the firm friend of law in his new home.

The substitution of the penitentiary so largely for the gallows has been due to the increased value of man which arises with the growth of capital, the facility of subsisting and employing the prisoner, which attends the introduction of machinery and the subdivision of labor,* the sensitiveness of the public conscience in view of occasional instances of convicting the innocent, and the general growth of humanity and regard for human life.

175. Social Crimes and Insanities.—Quetelet found that both the weather, and the seasons, had the same influence on crimes, and on insanities. The ancients recognized, or imagined, so close an influence, or sympathy, as existing between the moon and mental aberration, as to call the latter after the former, lunacy, or moonstroke. Absurd as this has been held, modern medical science drifts around to the same point, by attributing much mental derangement to malaria or diseased air, and then making the symptoms on the 7th, 14th, 21st, and 28th days the test as to whether the disease is malarious, since these are merely moon periods. Both views may be mistaken, and the latter merely a survival, in a scientific form, of the earlier superstition. On the other hand, it is possible that a force which can lift the ocean ninety feet, in the Bay of Fundy, may excite tides in the atmosphere which have their effects on the mind and will. Whether any of these hypotheses be true or not, there is a strong analogy between the epidemics of unreason, cyclones of cruelty,

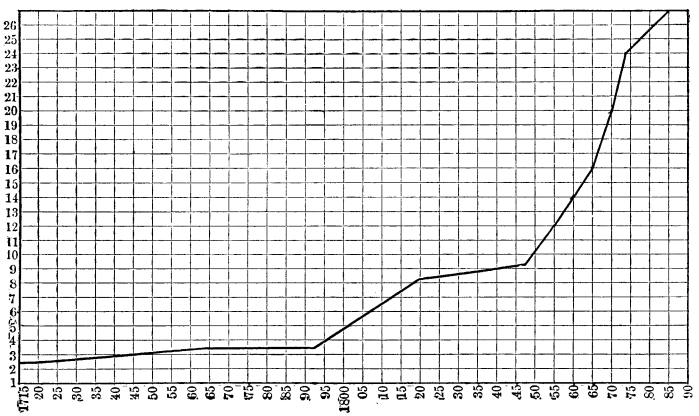
* In the penitentiaries of Illinois, 17 mechanical trades were taught in 1870.

and outbreaks of social war, which occur in the world of collective humanity, and the storms and tempests of the physical world. These epidemics of unreason enlist great masses of men, even millions at a time, in their phantasies. As these millions could only cohere through the leadership of their noblest and purest minds, their most zealous, self-sacrificing, and just men, it is found that in these great social upheavals it is the very best men that lead in the work of mischief, if mischief it is to be called. The persecutions of the Christians by the Roman Emperors, the tendency of dying persons to bequeath their lands and goods to the church, and to overestimate the virtue of charity as compared with industry, led into the middle or dark ages. The exaggerated value which men, during several centuries, attached to the work of bringing the whole world under one religious government—a fanaticism which had its outcome in a sacrifice of industry to monasticism and in a waste of European life and energy upon the crusades—in religious persecutions, and in the prosecution and burning of witches, and the religious wars, all threatened to quench civilization in Europe wholly. There is little doubt that these veritable cyclones of human hate, black with all the destructive possibilities of reviving barbarism, were led on by the very best, purest, and noblest minds, the most spiritual and self-sacrificing, as they were judged at the time, in the world's best circles. There is equally little doubt that it was the substitution of the spirit of gain, of industry, and of business, caused by the revival of trade in Europe under the stimulus of the discovery of the Indies and of America, which rescued the world from the darkness into which it was ever more deeply plunging, by bringing back the thoughts of mankind to their secular and material interests.

Looking at these social tendencies, it becomes evident that they go far toward equalizing the ultimate influence of the more successful and the less successful, or of what are usually called the good and bad classes of society. The latter drift into the petty stage of individual crime, and are eliminated by society through some mode of punishment. The former take the lead in great holocausts of suffering and slaughter, which equal, in the evil and misery they inflict on the world in a single year, or generation, all that its combined criminal and vicious classes would inflict in a century. At the rate of 240 murders per annum, in France, the individual wickedness of that country would in seventy years take as many lives as its social and collective fanaticism, acting

in the name of justice and public spirit, took in one year of the French Revolution,* and it would require four French Revolutions to make one St. Bartholomew's night. †

Roughly estimating, as many lives were destroyed in the crusades ‡ as have been ended in Europe by private murder in 3,240 years, or since King Sesostris led the armies of Egypt against Asia. Yet it would be doing injustice to the leaders in the crusades to suppose that their motives seemed to them less sacred than the absolute righteousness itself. It becomes those who have charge of the state, therefore, in its executive, legislative, and judicial functions, to observe with a wary and watchful eye the movements of those who have influence, popularity, and power, rather than those of the burglars, hall-thieves, and midnight assassins. The latter will be reached by the police and the courts, and opinion is united as to their quality. But the great upheavals and oppressions, holocausts and sacrifices, civil wars aud revolutions, will originate with the public-spirited, patriotic, pure, and virtuous. The people who give the statesmen most trouble, and the generals and armies most business, are those



RATE OF GROWTH OF THE WORLD'S NATIONAL DEBTS SINCE 1714, ON A SCALE OF $1,000,000 TO THE SECTION LINE PERPENDICULARLY, AND 5 YEARS TO THE SECTION LINE HORIZONTALLY.

---

* 17,000. † 80,000. § 7,000,000.

who are intent on making the world better, or on obtaining for some of its people enlarged rights and greater purity, and for themselves a higher niche in the temple of fame.

176. The Recent Growth of Debt.—The growth of the aggregated debts of the nations which borrow in the money market of Europe forms the unsettled problem in modern political finance. Since 1714 the world's national debts have multiplied fifteen-fold, viz., from 1,500 millions of dollars to 26,970 millions.* Measured by half decades, the rate of increase appears in diagram on page 447.

Mr. Adams † says of a loan to government: "Its full effect is to check further industrial expansion, and this it does by turning the energy of the country into other channels." Yet Mr. Adams says that "employed capital will not be placed at the disposal of the state, and that a public loan at normal rates of interest can not exert any decided influence upon established industries, since there is no motive presented to one whose capital is well invested to withdraw any part of it from its accustomed employment, and place it at the disposal of the state."

Mr. Adams infers that it will take the fund that would have gone to new enterprises, because no man having a fund well in-

---

* The *Iron Age*, referring to an address to the National Board of Trade by Mr. Price, quotes Lord Derby as having predicted that European nations must repudiate. The annual burden of $800,000,000 of interest is a load they can not carry. It continues: "Spain, Portugal, Austria and Greece are bankrupt; Russia and Italy are without credit; and the great States of Great Britain, France, and Holland are exhausting every measure of taxation to maintain solvency and credit.

"To the constantly growing sum of obligations which constitute our credit system must be added an enormous total of public indebtedness contracted by minor divisions of the state, corporations, firms, and individuals. For our own country the showing is assumed to be about as follows:

Present national debt, December 1, 1887	$1,675,816,660
State	226,597,594
County and municipal	821,486,447
Railway	4,163,640,144
Banking	4,581,706,203
Private banking	1,500,000,000
Record	6,000,000,000
Mercantile	3,000,000,000
Individual, otherwise than above	6,000,000,000
Aggregate	$27,969,247,048

"This total is more than one-half the entire census valuation of 1880. If our population is 60,000,000, it means a per capita indebtedness of $465, or more than the average income of the family in Massachusetts."

Singularly enough, while some are distressed by these predictions, Prof. MacLeod, of Cambridge, counts all this volume of debt as "currency," and therefore "means of payment," as well as principal to be paid.

† "Public Debts," p. 62.

vested in established enterprises would see sufficient profit in it. But, as we have repeatedly seen, the fund that goes into new enterprises demands as a rule a far higher rate of interest than is earned in established enterprises. Capital migrates only under the inducement of higher rates of profit. If it will not abandon its established enterprise, in which profits are fast descending to ordinary rates of interest and rent, and wherein perhaps they are fifteen per cent. per annum, why should it be withdrawn from the prospective venture in which 50, 100, or 500 per cent. are looked for?

Mr. Adams says: "If filled at all, it will be filled from that fund of free capital which would otherwise have been invested in new industries." On the contrary, the class of persons who buy government bonds are at the very opposite pole of the industrial world from the class which invests capital in new industries. The latter are the class full of ideas, but without a surplus, generally borrowers of the means they invest. The lenders to government are a class seeking safety by avoiding the risks of industrial investment, either because their capitals are too large to admit of their superintending industrial enterprises, or, as in the case of women and salaried employees, they feel too distrustful of their own judgment to venture.

Prof. Adams' suggestion of the effect of loaning to governments overlooks the fact, also, that no person could be deterred from investing in any new enterprise by the fact that he had already invested in bonds, since the bonds are as convertible as money. The ready answer of those who solicit him to invest, if he should object that he had already invested his money in government bonds, would be, "That is an aid rather than an obstacle, as we will take your bonds as even better than cash, for they will draw interest until we wish to use them, and whenever we wish to use them they are as good means of payment as money."

The confusing element, in tracing the economic effects of loans to government, is that the bond which is purchased is in the economic sense "money," or "inflation," as truly as if it were an additional issue of paper money. Hence, by its effect on prices generally, it has the same effect to stimulate new enterprises instead of discouraging them, which all additions to the volume of the currency have.

Mr. Adams * fully explains this use of government bonds as in-

* "Public Debts," pp. 55–7.

ternational means of payment. He shows that when France, as a means of paying the German indemnity, called for a loan of 2,000,000,000 francs, more than four times that sum were offered. About two-thirds of the sum offered were offered from outside of France, one-tenth of it from Germany itself; that in fact it was only a readjustment of credits which did not involve any drain of capital from the industries of France, but only an addition of new "international values" to the security market.

Mr. W. L. Fawcett * regards it as inconceivable that such an increase in the volume of national debts should have any other outcome than early general bankruptcy among all the weaker nations.

Mr. Adams cites the attempt of the foreign bondholders to conquer Mexico and enthrone Maximilian, which failed, and the later successes of English bondholders in Egypt, of French bondholders in Tunis, and the abject subservience of Peruvian politics to foreign bondholders.

He also holds † that it is the fact that the possessing or property-owning class, the moneyed interest, has captured the machinery of government that "affords such guarantee as exists, that moneys borrowed by government will be repaid."

Here again Prof. Adams clings to the "debt" idea and forgets the "international value" function, or currency office, which he explains so fully in the case of the French debt. The national creditor not only does not cling to the notion that his debt will be paid, but in the case of the debts of most of the governments of Europe the notion does not exist. All the European debts are interminable. They never fall due. They are merely permanent savings banks in which the people may make their deposits at interest when not needed, and when needed may, by sale of the bond, draw out their deposits. Of all financial investments they are that in which the people may most nearly "eat their cake and have it left." If the government, by paying off its debt, deprives the people of the privilege of lending to it, they take their money to the savings banks, or deposit it in the national banks, to be loaned out by them to merchants and manufacturers. In this case it is, usually, the substitution of a social loan of a narrow sort for a social loan of the broadest sort. For, all surplus uninvested funds have to be loaned in some way. Wherein lies the danger of lending them to the collective people through a

* "Gold and Debt."

† "Public Debts," p. 9.

national debt, as compared with lending them to the banking class? We do not present these suggestions as solutions. The debt question is the nearly unexplored problem in existing political economy. The facility with which governments borrow money is pushing them onward toward a more and more socialistic order of society. The tendency is toward a rapid increase of the enterprises, such as schools, telegraphing, internal improvements, of which the state will take charge in the interest of production of commodities. The socialists demand that it shall take charge also of the distribution of wealth, of interest, rent, and profits. Meanwhile, the novel fact in finance is that in the manufacture of debts governments are at the same time supplying means of payment, if not in the full degree asserted by Prof. McLeod, at least in the full degree in which the debt so issued is readily negotiable. The debt is money. The paradox is orthodox.

Socialism rails against interest, yet seeks nationalization of land, railways, mines, manufactures, schemes whose carrying out involves increase of debt, and hence of interest. It proposes to confiscate rents, yet thrives upon that rapid increase of town population, relatively to rural, which chiefly swells rents.

The modern state is a new factor in finance. Once the state conquered and plundered—now it borrows and pays. Then it was the General. Now it is the Banker. Poets loved the former, for verse can deal with slaughter, but not with profits, rent or interest. When the people prosper the poets are in pain, but the economists smile. Tennyson complains about the fleet, and Lowell declares that France and America are nursing little men. Aristophanes anticipated both "Gresham's Law" and Tennyson's and Lowell's complaint, by twenty centuries, in these lines:

> "Oftentimes we have reflected on a similar abuse
> In the choice of men for office, and of coins for common use;
> For your old and standard pieces, valued and approved and tried,
> Here among the Grecian nations, and in all the world beside,
> Recognized in every realm for trusty stamp and pure assay,
> Are rejected and abandoned for the trash of yesterday;
> For a vile, adulterate issue, drossy, counterfeit and base,
> Which the traffic of the city passes current in their place!"
>
> —[*Aristophanes*, "Frogs," 891-898; Frere's Translation.

CHAPTER XII.

TAXATION.

177. Origin of Taxes.—Inscriptions, on some of the oldest monuments of Egypt, indicate that tribute was levied on conquered tribes; enforced contributions were obtained from provinces, to sustain the cost of the funeral honors due to the sacred ox; spoil in gold and silver, and in various products of the land, was wrung from subject tribes, in a manner that brought the methods of taxation into close resemblance to the plunder practiced in war. So, American merchants, after a short residence in China, have returned from that country, with the fixed impression that thieves were licensed by the government. So little resemblance exists between the collection of taxes there, and in America, that they had not recognized the tax-collector in the Chinese depredator, but supposed him to be literally a "licensed thief." This would be the natural effect of that system of "farming the revenues," as it is called, which, from the very dawn of time, has been the prevailing system of levying taxes in most parts of Asia and Africa. The revenues are "farmed" when the governments rent a province, or district, to the chief satrap or governing officer thereof, for a stipulated annual sum, leaving him to collect as much more as he may, or as the district will bear without rebellion, by such methods as he finds most convenient. Usually the satrap or governor sub-lets to smaller farmers, and these to others, and all collect partly upon the standard of ancient customs, and partly according to "what the district will bear," *i.e.*, what the people will pay without murmuring or rebellion.

From the system of "farming the revenues," which is but one remove from licensed robbery, the first advance toward equity, among commercial and trading nations, is to a fractional rate one-half, fifth, eighth, or tenth of certain specified products of the soil. This is the system described in the Old Testament as operative among the Hebrews, and, combined with certain elements of the system of farming the revenues, it still prevails in Turkey.

In India, by the institutes of Manou, a tax of one-sixth, one-

eighth, or one-twelfth was levied on grain, one-sixth on sales of goods, one-twentieth on sales of lands, and one-fifteenth on the net annual revenue of cattle, gold, and silver.* Traces of a poll-tax (an equal sum on each person) also are found.† Heavier duties, even at this early date, were levied on the importation of silk fabrics than on the raw material,‡ in order that the wages and profits of weaving and dyeing silks might be secured to the Hindoo artisan. On emergency, in India, a right between our right of military seizure and of eminent domain existed, to take one-fourth the property of the subject as a tax.

In Egypt, according to Brugsch, certain inscriptions, in the reign of Usurtasin, indicate that taxation was levied on provinces in proportion to income, but whether proportionate to the income of the province, or of the people, is not clear.

Among early nations the government is often itself a trader, as in Tyre, Sidon, Phenicia, and Carthage. In such countries, as well as in those wherein the government is the sole land-owner, as in modern India, and in those wherein the ruling families are the chief landlords, as in England in the feudal period, taxation assumes the form of rent of land. In England, in the feudal period, this rent was paid mostly in military or personal services, and taxes in money were little known.

Hence Blackstone treats the old feudal forms of revenues as the "ordinary revenues" of the crown, while excise and customs duties, and all the ordinary modern forms of taxes, are classed as "extraordinary revenues," which do not belong to the crown of strict right, but require to be granted to it by a special act of parliament. This is the origin of the theory that "taxes," in the modern sense of the word, are only grantable by the representatives of the people. These are in England the House of Commons, to whose powers, in the main, the lower House of Congress, and of our several State legislatures, succeed. Hence arises the practice in England of making up an annual budget, or account of revenues and expenses, on the presentation of which an opportunity is afforded to criticise government policies, and to vote upon or reject them by making a modification or change in them a condition of granting the budget. This budget is supposed to be presented by the premier, or actual head of the government, whose function it is to govern, while that of the queen or king is merely to reign. By this machinery a division is effected between

* Marigny. † De Parien. ‡ "Government Revenues," by Roberts, p. 31.

the dignity of the government, which rests in the crowned head, and the wisdom or policy of the particular persons conducting it, which centers in the premier, who may hold either or several of the chief cabinet portfolios, viz., he may be first lord of the treasury, chancellor of the exchequer, secretary of state for foreign affairs, etc.

Out of these customs have evolved our own constitutional principles, that measures relating to the revenue must originate in the House of Representatives and not in the Senate, and that the President and several heads of departments shall make up a budget, or annual report to Congress, of the condition of the finances and business of their several departments, at the opening of each session of Congress.

In Rome there were three systems of voting, one of which, that by centuries, divided the people into six different grades, according to wealth and the number of their retainers and dependents. It then gave them a power in determining public questions, especially of peace or war, proportionate to their wealth and military resources, and compelled them to contribute to the burdens of war in like proportion. Gibbon says: "History has never perhaps suffered a more irreparable injury than in the loss of the curious register bequeathed by Augustus to the Senate in which that experienced prince so accurately balanced the revenues and expenses of the Roman Empire."* Guizot and Wenck estimate the annual tributes, derived by the Roman Empire from subject nations in the time of Augustus, at not less than $200,000,000. Asia paid $21,000,000 a year, Egypt $11,000,000, and Carthage a war indemnity of $20,000,000 spread over fifty years.

Julius Cæsar laid duties of from an eighth to a fortieth on imports, and Augustus introduced the excise or internal tax on sales, legacies, successions, and inheritances, and the license tax on occupations, even down to petty retailers and panderers to vice. The system of farming the revenue prevailed, and in the New Testament we get a graphic view of the contempt and hatred felt for the tax gatherer. In Gaul, the taxes amounted, according to Gibbon, to $45 a head, and were in part a land and in part a poll-tax. This Gibbon calculates at four times the average rate of French taxes in his day. Throughout the empire mines and quarries, salt, fisheries, and forests were subject to special charges, and tolls were collected on post-roads and bridges.

---

* Gibbon's "Decline and Fall," vol. i. p. 187.

Constantine in the Eastern Empire practised the system, which continues in Turkey to the present day, of taking a share of the produce of the land. A sum was apportioned to a province, and this was divided among the population, until it became a definite sum per head to each.

China has, from the dawn of time, taxed the land from one-fifth to one-third its gross product. Transit duties, next to the land-tax, reap the largest return. Then follow taxes on stores, markets, corporations, salt, on the manufacture of porcelain, silk, and varnish, on the sale of offices and degrees, on rank, and finally duties on imports and exports. In India, a land-tax or rent is collected by the government as the national landlord, amounting to a half or third of the annual produce, while a very heavy tax, 2*s.* 6*d.* per pound, is levied on salt. This salt-tax has occasioned the habit, in the people of certain districts, of eating the dirt which contains the salt, as it is dug from the earth, in order to escape the revenue tax collected on it, under very harsh penalties if it is refined. This dirt-eating system in its turn has produced peculiar diseases of the digestive organs of the ryots who participate in the habit.*

178. Standards of Equal Taxation.—Taking society as it has existed in all ages, the chief, and almost the sole, object of taxation has been to provide an income and means of expenditure for those engaged in administering the government, and for the maintenance of their armies and police. The chief motive of those engaged in administering the government, in earlier periods, was to maintain their own power, and, as the securest mode of doing this, they gradually gave more and more attention to administering justice between citizens, promoting the arts, introducing learning, giving an intelligent direction to superstition, and ameliorating the tendencies of their savage populations toward violence and fraud. At last, in modern times, education, internal improvements, the promotion of industries, the care of the poor, defective, and delinquent classes, the interpretation and adjudication upon contracts, perfecting means of transportation, including highways, canals, steamship lines, and stimulating discoveries and inventions, have become leading objects of government. Even the coercive administration of justice has become secondary in importance, and cost, to the means taken to further industry and general enlightenment.

Theories of taxation have varied with these changes in its

---

* Seymour Keay's "Spoliation of India."

objects. So long as taxes were laid as a means to keep the governing classes in power by military force, the chief motive held in view would be to levy them where the most revenue could be collected, with most ease, at least cost. When the state became itself engaged in the work of production, as France is to-day in the manufacture of tobacco, and as the Phœnician kings were engaged in foreign commerce, taxes or prohibitions would be imposed on all rivals in the same trade. The English governernment maintains, in this spirit, a monopoly to itself of the opium production in India.

When theories of equality began to be broached by the French and English philosophers of the eighteenth century, they naturally concentrated their efforts on some plan of ideal equality in taxation. Here, however, arose endless themes for dispute, owing to differences of judgment as to whether possessions, persons, incomes, consumptions, occupations, processes, descents and inheritances, contracts, profits, acres, or productive or idle capital should be equally taxed. Each of these forms an independent standard of "equality in taxation" wholly irreconcilable, in its practical workings, with all the others. One will say it is equal taxation to tax each man in proportion to the value of the property he owns. This is the basis or standard, at which all the state, county, and local taxation aims, in most of the states of the United States, but not in the General Government. The objection to this is that capital that is earning nothing, and that perhaps is in the way to be swallowed up by losses, is so taxed as to hasten the ruin of its owner, while men who are making large incomes, but expending them as fast as they make them, are not taxed, though they are enjoying far more of the world's wealth than those whose possessions are considerable, but whose incomes are small. Hence, the demand for the equal taxation of possessions is met by the counter-demand for the equal taxation of incomes, or of expenditure, or of consumption. Another will say, tax manufacturing processes equally, according to the product turned out. Another will conscientiously think it equal, to tax occupations equally, according to their earnings.

Still another will deny that taxation should be equal, and will allege that taxation should rest more heavily on superfluities, luxuries, and vices, *e. g.*, on tobacco, spirituous liquors, licenses to sell liquor in drinking saloons, on shows, brokers, money lenders, peddlers, usurers, on people who keep dogs, silks, diamonds, carriages, many servants, large retinues, etc. One holds that

unoccupied land should be specially taxed to punish the wrong to society of keeping it out of the market. Ricardo holds that to tax any form of capital is a discouragement to labor, since, in his view, capital is the wage-fund from which labor must be paid, and, intrinsically, all capital is unproductive except as it is made a means of employing labor.

In this conflict of theories, first, as to whether taxation should be equal at all, and, secondly, what element or aspect of man should be selected in estimating equality, there could be no other feasible course, open to governments, than to combine taxation on nearly all these conflicting bases in the degree that a national legislature, or bureau of taxation, would be able to agree upon. This is what is meant by saying that taxation is a practical question, or, largely, a compromise between conflicting theories. Obviously, nothing would be more despotic than to seize upon one only of these standards of equality as being the true and absolute standard, as, for instance, "incomes," when as many persons favor an equal tax on every person, or equality according to the value of one's possessions, or taxation according to consumption, or the taxation of vices, luxuries, monopolies, etc.

179. An Ideal Theory of Taxation.—Adam Smith has laid down four rules which are supposed, by some, to embody a system of taxation which ought to be satisfactory to every mind. They are good rules, relatively to certain others which would be worse, and very poor rules relatively to the actual practice of many governments, which is better than these rules. We shall examine them consecutively :

"1. The subjects of every state ought to contribute to the support of the government, as nearly as possible in proportion to their *respective abilities;* that is, in proportion to the revenue which they *respectively enjoy* under the protection of the state. In the observation or neglect of this maxim consists what is called the equality or inequality of taxation."

The opening words begin by the assumption, so common among free traders, that only "the subjects of a state" ought to contribute to the support of its government. This is to ignore, at the outset, a cardinal point in the protectionist experience, that not only the subjects of a state, but aliens who seek to do business or sell their wares within its borders, or in any way to get the benefits of its markets and scale of values, ought to, and under protectionist duties do, in many cases, contribute to the support of its government. The protectionists claim to be able to tax an international constituency of producers and consumers on all interna-

tional trade, *i. e.*, trade between citizens of different nations. Whether they do so or not will be fully discussed in our next chapter. Meanwhile, the opening passage of the above rule is defective in ignoring this important fact, which limits the acceptance of the rule to a class of closet theorists who have never yet given a fiscal policy to any nation in the world, and doubtless never will. The two recommendations that follow are that subjects contribute in proportion to their respective abilities, and in proportion to what they enjoy. Their abilities to enjoy will be measured, by one man, by their possessions, and by another, by their income. A tax on the first is a tax on capital, while a tax on the second is a tax on income. Thus the single word "abilities" covers two very unlike modes of taxation. But both are distinct from "what they enjoy," for this last again is measured by expenditure, and by intellectual capacity to obtain enjoyment. To tax expenditure is to tax consumption, ostentation, and luxury. So far as we tax consumption, it becomes very nearly in effect a tax on persons, for the poor man with a large family will consume as much, directly, as the rich man with a small family. Taxing ostentation and luxury is taxing that very dispersion of wealth, and breaking up of hoards and estates, in which the professed champions of the poor are so deeply interested. For, nothing tends so directly to the dispersion of wealth, by the richer among the poorer, as most forms of luxurious and ostentatious living. Thus Dr. Smith's first prescription divides itself into seven, viz., into taxes on capital, on incomes, on expenditure, on capacity, on consumption, on ostentation, and on luxury. Tax-gatherers can not travel far together, on a road that forks so often. Dr. Smith's next precept is :

"2. The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person. The certainty of what each individual ought to pay is, in taxation, a matter of so great importance that a very considerable degree of inequality, it appears, I believe, from the experience of all nations, is not near so great an evil as a very small degree of uncertainty."

This might seem self-evident to a man in a closet, but it does not agree with any experience we have of society, and it is not of the least practical importance to either the statesman or the taxpayer.

The tax to which each individual is subjected, in every relation of life other than citizenship, is both uncertain and arbitrary. The degree in which he is taxed in his strength and vital force, first, to support himself, then to make for himself a good name and

estate among his fellow-men, then to maintain, provide for, and conduct his family, are all uncertain, unequal, and often very arbitrary, and of a kind to involve absolute heroism to endure.

Out of these social taxes, however, come all social heroisms and nobility. Where then in nature do we get the basis for assuming that a social state, which is full of social inequalities, and of unequal burdens on every hand, and wherein the prime duty of the virtuous is to help carry the derelict and delinquent, wherein also the wise must help bear the foolish up above and out of their folly, and wherein the strong must be taxed often to their full ability to secure the survival of the weak, the healthy of the diseased, and the competent of the incompetent—how is it that when this unequally-yoked-together mass of citizens are conglomerate into a state, there must perforce suddenly spring out of this compost heap of inequalities a fair, white, ideal flower, which shall embody in its purity a principle on which no two minds can agree? To the man that desires nicotine this flower shall contain nicotine and no other essence, to the man who desires cocaine it shall contain cocaine, and to the man that wants lavender or rose it shall be lavender or rose.

But neither the statesman nor the citizen, in fact, cares or needs to know who pays the tax, any more than the citizen needs to know what particular Sing-leng-foo in China cultivated the tea which he sips, or what negro in Georgia hoed the cotton which he wears, or what were the features of the sheep whose wool adorns his back. The question, who pays the tax? is often a wholly insoluble conundrum to the economist, the tax being passed on, in its incidence, from one hand to another, until its exact incidence is lost in the tangled network of social causes and effects. But so are all other costs of living lost, if we attempt to follow them, in the same tangled network. An English parliamentary committee on local taxation, presided over by one of the foremost of England's practical and theoretical economists, George J. Goschen, reported in 1872 that they could not tell, and no man could possibly find out, whether the tax on the occupier of houses was paid by the tenant or the owner of the land.* But shall no houses be rented until we find out whether the landlord or tenant pays the occupier's tax? Mr. Mill is in an absolute mud-

* The report says ("Goschen on Local Taxation," p. 178): "That your committee have examined many witnesses, and received at their hands very conflicting opinions as regards the proportion in which the burden of rates at present falls relatively on owners and occupiers."

dle, as to whether taxes on exports are paid by the foreign consumers or by the domestic producers of the exported product, but inclines to the opinion that they are paid by the foreign consumers, and that a nation may often greatly benefit its own trade by taxing its exports.*

The very able economists, who framed the constitution of the United States, must have differed *toto cœlo* from Mr. Mill on this point, or they would not, with such unanimity, have prohibited duties on exports. Indeed, if any considerable portion of the people of the United States should think as Mr. Mill does on this point, it would be but a very little while before the Constitution of the United States would be amended, and a duty on raw cotton imposed. We do not mean to express a difference from Mr. Mill as to duties on exports, but only to point out that where, in relation to so many taxes, it is impossible for statesmen to agree as to where the incidence of the tax actually rests, yet the tax produces the revenue, and the citizen prospers, the question where it rests becomes a mere philosophical and metaphysical subtlety, of no more practical importance than the question where the ultimate responsibility for human conduct rests, or where the human will begins, or where in economics the cost of production begins—whether with the final process, or with the production of the implements, and if so whether production shall be deemed to include invention of the implements, in which case the effort to compute the cost of producing a bushel of corn would carry us back to the beginning of the world. Such subtleties may be, and largely through Mr. Mill's influence are, mistaken for economic science, but they have nothing to do with it, but belong to the widely different domain of metaphysical gymnastics.

Students must gradually learn the distinction, between the mental daze that comes from reading propositions like those of Mr. Mill, which begin with a "let us suppose," then carry you through the meshes of a tangled but non-existing hypothesis, and finally dump you with a triumphant "therefore" in a quagmire of conclusions, which agree only in being at war with the existing system of things, whatever it may be—and political economy, at least as taught by the historical school. Dr. Smith's third rule is:

* Book v. ch. 3 (p. 574, Loughlin's ed.) he says: "By taxing exports we may, in certain circumstances, produce a division of the advantage of the trade more favorable to ourselves. In some cases we may draw into our coffers, at the expense of foreigners, not only the whole tax, but more than the tax; in other cases we should gain exactly the tax; in others, less than the tax. In this last case a part of the tax is borne by ourselves; possibly the whole, possibly even, as we shall show, more than the whole."

"3. Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it. Taxes upon such consumable goods as are articles of luxury are all finally paid by the consumer, and generally in a manner that is very convenient to him. He pays them little by little, as he has occasion to buy the goods. As he is at liberty, too, either to buy or not to buy, as he pleases, it must be his own fault if he ever suffers any considerable inconvenience from such taxes."

This rule emphatically and throughout contradicts the last. For the most convenient time and manner in which to pay a tax is when we pay it without knowing it, whether we are the producers of goods, working for a profit, and paying the tax in order to get them into a particular market, or whether we are consumers and buying the product. It is not true that taxes upon such consumable goods as are articles of luxury are all finally paid by the consumer, or that a different rule prevails for articles of luxury from those that govern other products. Indeed, there can be no distinction in economics between luxuries and necessaries, as may be illustrated by the very simple fact that in civilization clothing is necessary, in Central Africa it is a luxury. In Uganda, moreover, bamboo is necessary, and most kinds of money have little or no value. In civilization bamboo is nearly worthless, and money is constantly necessary. Dr. Smith's fourth rule is :

"4. Every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."

This rule in practice contradicts the second rule. For the second rule assumes there are many taxes, concerning which it is true that the quantity each person pays, and even the question which of several persons pays, is uncertain, in the sense of unknown, *i. e.*, is not capable of being known. Now, where we can not know who pays the tax, it is obviously fruitless to try to measure the proportion of the amount paid which does not go into the treasury, against the amount that does, so as to make the ratio of two unknown quantities to each other the gauge by which to determine the justice of a tax.

Again, there may be great difference of judgment among men, as to which of two modes of tax does take out, or keep out, of the pockets of the people, most money relatively to what it brings into the public treasury of the state.

Great Britain taxes the importation of leaf tobacco 3*s.* 6*d.* sterling, or 87 cents per pound. To prevent this import duty from causing Irish and Scotch farmers to cultivate tobacco, as they could do at an enormous profit, by reason of the duty thus im-

posed on the foreign article, the government prohibits absolutely the domestic production, making it criminal to cultivate the leaf anywhere in Great Britain. This suppression of the domestic production is supposed to have the effect to cause the entire sum, by which the price of tobacco to the consumer is increased, to go into the treasury, *i. e.*, no part of it goes to any domestic producer. But lo! to accomplish this result, there is kept out of the pockets of the people, not merely the amount of the tax paid, but the entire profits of the possible domestic production of the leaf. No one can tell how peculiarly the climate of Ireland might have proved to be adapted to the culture of tobacco, if it had been allowed. It might have proved to be as much superior to any other point in the world, for the culture of the leaf, as the Southern States are for the culture of cotton. In that case Ireland could have produced the tobacco crop of the world, and, instead of famine and decline, might have maintained a population of nine to twelve millions of people.

Yet we are told that the signal merit of this tobacco tax is, that it takes not a penny from the pockets of the people, that does not go into the treasury. In fact, by suppressing a domestic production, it keeps out of the pockets of the people the profits of a possible national industry, the value of which no man can compute.

180. The Search for the Incidence of Taxation and of Specific Taxes.—By the incidence of a tax is meant the fall, "blow," or deduction from wealth, which it effects on a particular person, and this involves the defining of the final person upon whom the tax rests, and beyond whom its burden does not go, and has no effect. It has never occurred to the writers on this subject, that if the ultimate incidence, or final deleterious effect, of a tax or burden can be defined, much more by parity of reason ought we to be able to define where the benefits of production, or of a new aid to production, stop. We ought to be able to point out the extreme outward person upon whom the beneficent effects of the invention of printing, the discovery of America, or of gold in California rests. A tax, considered as a diminution of production, can hardly be measured until we can assign limits to the effects of aids to production. For, peradventure, the tax itself may be an aid to production, and in that case it has no incidence, properly speaking, since its supposed "blow" is converted into a caress. In discussing Adam Smith's ideal theory of taxation, we elsewhere point out that standards of equality may be as numerous as the persons who propose them.

A would think it equal that B pay the same as C. This calls for a poll tax. In inferior or barbarous races, where no capital exists, a poll tax would be as equal as any other. B thinks it equal, that A and C pay according to what they possess. This calls for a tax on capital, or savings, or principal. This is equal in as far as capitals and incomes are equal. C thinks it equal that A and B pay according to what they earn or receive. This calls for an income tax. Income taxes are equal wherever incomes are equal. D thinks it equal that A and B pay according to what they enjoy or expend. This calls for a tax on consumption or rate of living, which is an equal tax as to all who live at an equal rate of expense. E thinks it equal, that A and B should pay taxes, at the point where it will, incidentally, cause industries not previously possible to become equally possible to both A and B, whereby they can be supplied with the means to pay the tax and make a profit besides, so that by paying a tax of say five they are benefited to the extent of fifteen. This calls for taxes for improvements, schools, lights, sewers, and protection to domestic industry. These are equal except as to such persons as do not intend to live by industry, and who have therefore no interest in its protection or defense. F thinks it equal that A and B should be taxed according to their respective utility to the community. If A is rendering valuable service, say in teaching school or inventing machinery at small pay, or in introducing capital into new avocations which will be presently unprofitable, but ultimately of great public benefit, and B is getting high profits out of a business deleterious to the general welfare, as gambling, selling spirituous liquors, or prize-fighting, lotteries, bull-baiting, or vice, then B should be taxed a sufficient sum to at least make A's means of living as secure as his own, and this sum should be paid over to A for teaching school, or inventing machinery, or investing capital, or otherwise working for the common good.

Mr. Mill holds that true equality of taxation consists in equality of sacrifice, or suffering, in paying the tax. But this is chimerical, as those who have abundant means can not be made to suffer by any payment whatever. Dr. Smith holds that taxation should be equal according to the ability of each to pay. But who shall define ability to pay ?

Mr. Mill was strongly of the opinion that the increase of value in land, growing out of increased public appreciation, should be taxed. But if so, should the state compensate for the decrease of value ? and why should the rise in land, more than the rise in

stocks, in good will, or in personal popularity and reputation, be taxed? Labor has as little to do with causing a man to grow in public favor as with causing a lot of land to grow in price. Horace Greeley was wont to say: "Popularity is a happy accident of life, and political preferment is an affair of luck." Why should they not be taxed as well as the unearned increment of land?

If a particular kind of business be taxed, on the ground that it is inimical to public interest, a half or third of the persons that would else engage in it go out of it, thus enlarging the ratio of customers to those that remain, and hence removing from them the tax. Many sellers of liquors prefer a high tax on liquor, as it dignifies their calling and makes them collectors of revenue, and therefore agents of the state. When the increase in their monopoly of the custom reimburses to them the effect of the tax, upon whom does the tax rest? The customer will declare that he is not taxed, as he gets his goods of as good quality and at as low a price as before, but from fewer merchants. The persons who go out of the business can not be said to pay the tax, since they go into other kinds of business and are not in the line from whence the tax comes. The liquor seller who remains certainly does not pay it, as the increase of custom resulting from driving his competitors out of the business has reimbursed him. Thus, though the state treasury has certainly received an increase of revenue, no person can be proven to have sustained the actual burden of this increase.

So suppose a tax be laid upon land, with the effect to lessen the profits of investing capital in it. The number of competitors for its ownership diminishes, the same capital acquires more of it, and virtually the monopoly of those who choose to invest in it increases, with a corresponding increase in their profits, in the same manner as we have indicated in the case of tax on an occupation. But with this result,—on whom has the tax fallen?

Mr. Mill holds that, in taxing incomes, all that portion of the income which is laid by as savings should be exempted, since to tax savings is, he says, to condemn prudence. But, in such a case, the tax would rest on that which a person can not afford to save, but needs to consume. This is in conflict with his other principle that the tax should be so distributed as to equalize the sacrifice. It certainly involves a far greater sacrifice, to tax a man out of what he needs to expend for his support, than to tax him on the surplus he is able to save.

Annual taxes, being a portion of the year's production—the money proceeds of its crops and earnings—might be supposed to be in the first instance a deduction from the returns of the producers, at least until they return into the channels of production, as seed, or cause, in part, of the next year's production.

As a deduction from production, they must ultimately come out of the producers, either of commodities, or of their values. If an owner of land pays taxes, he pays them out of that portion of the year's annual production which he is able to appropriate. If the land enabled him to appropriate it, *i. e.*, if he pays the tax from an income derived from the rent of the land, then the tax is a deduction from the earnings of the industries carried on upon that land. If the land lay idle, earning no income, then the tax on it must have been earned in some industries carried on upon other land. But in each and all these industries one set of men, viz., the producers, ordinarily so called, create or bring to market the commodity or service, while another, viz., the users, employers, or consumers, by their demands give it value. Hence the production of commodities, and services, proceeds from one class, and the production of values proceeds from another. The commodity may be produced in London, while the value may be given to it, in Moscow or Buenos Ayres. The tax may be collected in London; its chief effect may be felt in Louisiana.

There are those who feel competent to decide, amidst this congeries of mazy influences, radiating outward indefinitely through all the transactions of mankind, what the ultimate incidence of a tax may be. To me it seems as hopeless as to attempt to set bounds to the causative operations of a winter's snow or a summer's rain.

To trace the degree of burden, effected by a tax, upon him who pays it, involves a difficulty which does not apply, however, to tracing the benefits of its expenditure among those to whom it is paid, or in whose midst it is distributed. The former involves a disappearance of values, the latter a re-appearance. In the former case the clews disperse as when water sinks into the sand. In the latter the visible wealth is reproducing itself before our eyes. Hence, those who contrast the beneficial effects of the expenditure of taxes within a country, with the draining of a country by foreign tax-gatherers, are not to be likened to the metaphysical philosophers who are seeking to found an ideal theory of taxation on speculations as to its ultimate incidence.*

* Thus, in the *Political Science Quarterly* for December, 1877, a report of Colonel Sir

A part of the incidence of King George's tax on tea was the American Revolution, and the Constitution of the United States. A part of the incidence of Cæsar's decree, that all the world should be taxed, may have been the birth of Christianity and the disintegration of the Roman Empire. As the French Academy was compelled to declare that the announcement, on the part of any man, that he had solved the problem of the quadrature of the circle, should be deemed conclusive evidence of lunacy, so the notion on the part of an economist, that he can define the ultimate incidence of any tax, must consign him to the limbo of visionaries needing, if not the restraint of coercion, at least the tender rebuke of pitying regard. One or two links in the chain of causation set in motion by a tax may be traced. Then the trace is lost in the great ocean of aggregate effort and common welfare.

The taxes collected to promote education are like the one-eighth of a farmer's crop, which he reserves for seed for the next year. It may be said to be a tax on his energies to be compelled to produce in any one year a quantity one-eighth greater than he can either enjoy or sell, and of which his only use is to throw it back into the ground as the condition of reaping the next year's crop. Yet the seed-tax imposed by nature is the source of all production. All well-expended taxes are certainly in the same category. This is proved by the fact that, in addition to paying the regular state taxes, men freely tax themselves to support charities, religions, amusements for others, political parties, or the

---

George Wingate makes the following very clear statement of the effects of taxation as a mode of wealth distribution. He says: "Taxes spent in the country from which they are raised are totally different in their effect from taxes raised in one country and spent in another. In the former case, the taxes collected from the population at large are paid away to the portion of the population engaged in the service of government, through whose expenditure they are again returned to the industrious classes. (More accurately, to the general circulation.) They occasion a different distribution, but no loss of national income (capital). . . . But the case is wholly different when the taxes are not spent in the country from which they are raised. In this case they constitute no mere transfer of a portion of the national income from one set of citizens to another, but an absolute loss and extinction of the whole amount withdrawn from the whole taxed country. As regards its effect on national production, the whole might as well be thrown into the sea as transferred to another country, for no portion of it will return to the taxed country in any shape whatever."

The economic principle involved here is not altered, when the nation which receives the money exported sends goods in exchange instead of rendering services in the shape of protection from foreign or domestic violence. The economic effects described are due to the depletion of the wealth of the country that parts with its money for any kind of services rendered by foreign parties (whether in the nature of protection from violence or protection of commodities), instead of having those services rendered by its own population.—*N. Y. Press.*

extra-constitutional part of state work, and many other social benefits. In all these cases men count the present tax to be only the seed sown of ultimate profit. In the degree, therefore, that men are far-sighted, sagacious, and enlightened, they are willing to sustain momentary taxation to effect ultimate results in which they feel that all have a common interest.

Adam Smith thought it extremely important that taxes should be direct and certain, so that each man should know exactly the extent of his burden. *Cui bono?* The assumption is that the man who feels them keenly will resist their unjust imposition. But is it a civic virtue so much higher to resist taxation, than to pay taxes, that special pains should be taken to make it painful? And are men to be deemed so mean, and void of public spirit, that no man will be supposed capable of resisting a tax unless he pays it himself? Of what great value is it, to any man, to have burdens made so extremely evident? Besides, if he on whom the burden first falls, after enduring all the pain of paying the tax, really passes it over, without knowing it, on some one else, would it not have been more painless, and just as true, to have collected the same amount of tax, by a mode in which no person whatever would have been pained by this unnecessary consciousness of being taxed? If the wisest economist can not define the cases in which a tax is transferred, why should the humblest taxpayer be pained with the belief that he is bearing a burden which, perhaps, he is only transferring to another?

The English ratepayers are taxed for the dwellings they occupy. Do they, or do they not, get their rents for a sum made less by the amount of the rate, than if they paid no rate? Economists like Mr. Goschen are wholly unable to say. If they do, then the landlord bears the burden. But the landlord is so wealthy that paying a tax, or accepting a lower rent, is a mere affair of figures to his steward. How can a tax be a burden to one who does not know of it, and to one who perhaps produces nothing, but ostentation and *ennui?*

The notion, that the incidence of taxes should be made certain, is like the kindred notion, that the law should be made simple. It demands an impossibility in finance. If the search for the incidence of taxes has brought to light any one valuable principle in taxation, of general application, it is that the taxpayer bears with most ease three classes of taxes, viz.:

1. Those which indirectly promote the energy of national production, in a degree which more than supplies to the taxpayer the

means of paying the tax, so that where a penny is taken out of one pocket in taxes, a shilling is put into the other in the form of better wages, more industries, or higher profits. These are the protective taxes, educational taxes, and all taxes that perform the seed-sowing function.

2. Those of which the returns come into the treasury of his own country, while the taxes are paid by the producers of other countries. These, too, are the protective taxes.

3. Those whose first incidence is a temporary scarcity of some product, but whose speedy effect is to greatly cheapen its supply.

181. The Practice of Modern Governments in Taxation—The United States.—Taxation, nearly everywhere, is distinguished into general, or national, and local. The latter is both raised, and disbursed, within a small fractional district, or subdivision of a state, to wit, a county, parish, town, school district, or the like, by some form of local board. The local taxation, in the city of New York, amounts to upwards of $20,000,000 a year, which is several times more than that of the State, and in 1860 equalled the expenses of thirty state governments combined. Mere state taxation must not be mistaken for the index to the local taxation. Illinois has about 3,500,000 people, and raises for state purposes about $3,500,000. If this be a fair standard for the country at large, the total state taxation would not exceed $60,000,000 a year for all the states and territories. Adding, however, the cost of local, city, park, and district expenditures of all sorts, probably the aggregate local taxation of the country equals the aggregate of national taxation. The latter is shown by the following budget for 1883 :

UNITED STATES BUDGET, YEAR ENDING JUNE 30, 1883.

[In millions and tenths of millions.]

Receipts :	
Customs	$214 7
Internal Revenue	144.7
Direct tax	.1
Sale of public lands	7.9
Miscellaneous	30.8
Net ordinary receipts	$398.2
Expenditures :	
War Department	$48.9
Navy Department	15.3
Indians	7.3
Pensions	66.0
Miscellaneous	68.7
Net ordinary expenditures	$206.2
Interest on public debt	59.2
Total	$265.4

The accompanying chart shows the total amount of revenue for each year, the general course of expenditure, and the degree in which the national revenues of the United States have been derived from customs duties, from the foundation of the government.

It is a plausible aphorism of Mr. Mill that customs duties, so far as they are protective, can produce no revenue, for they protect the domestic production, only in the degree that they exclude the imported article, and they produce revenue only on the quantity they admit. No instance illustrates more signally the importance of studying economics in the school of history and experience, instead of burrowing under a barren *debris* of ruinous metaphysical assumptions, however acute they may seem to be.

The above aphorism of Mill is on a par with the ancient demonstration, by the sophists, that motion is impossible, because as to any body in space there are only two portions of space in which it can move, since all space is comprised in these two portions, viz., the space where it is, and the space where it is not. It can not move in the space where it is, because, so long as it continues in that space, it moves not. And it can not move in the space where it is not, because it can never be in the space where it is not. Hence it can not move at all. As specimens of mere chop logic, one of these is as good as the other, and both are worthless. Bodies do move, and not only do protective duties collect revenues, but the entire body of tariff laws which include protective duties, always collects more revenue than those which aim not to protect. This will appear clearly from the following table of relative productiveness of customs tariffs in the United States during the so-called free trade or low revenue periods, compared with the more intentionally protective periods :

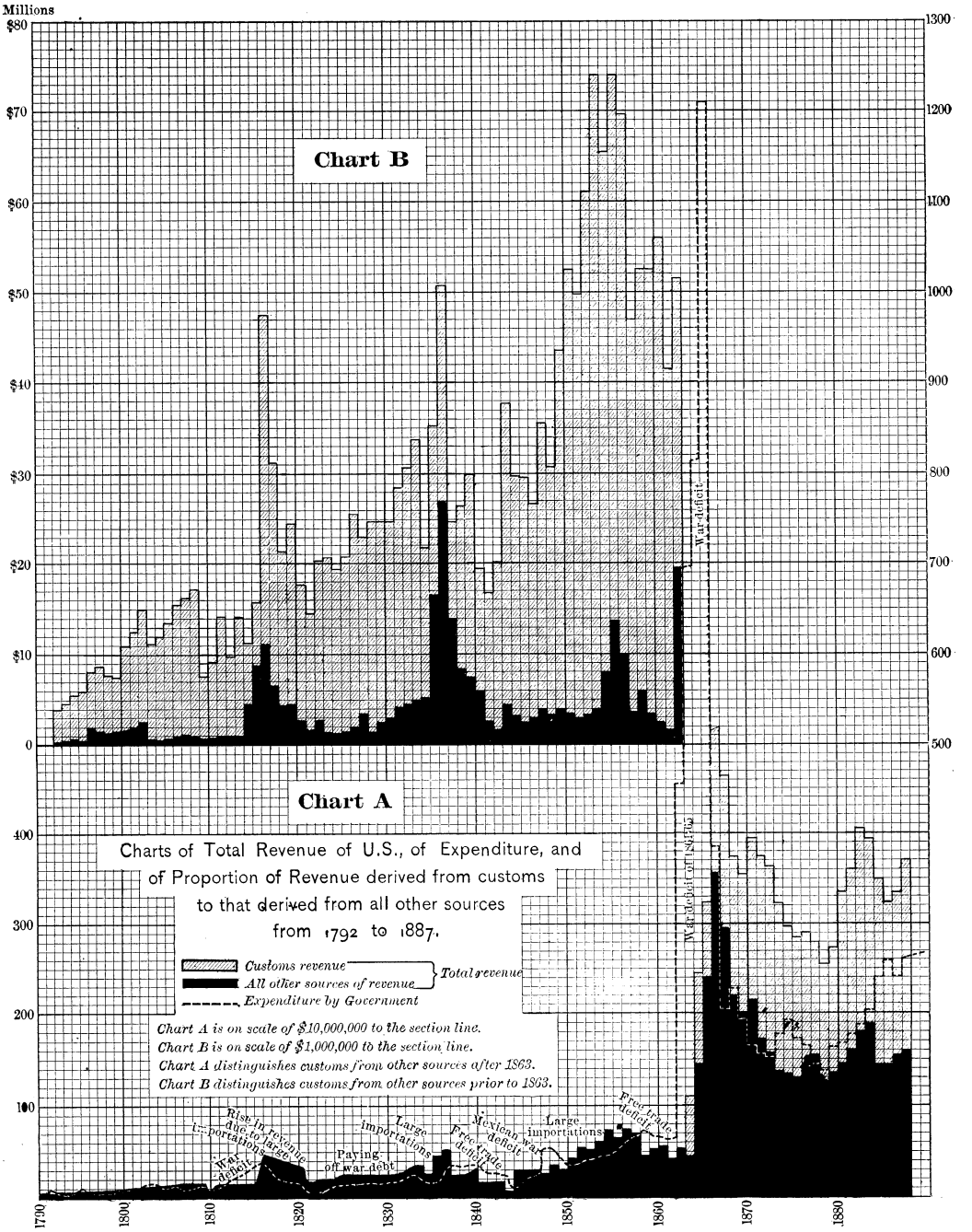
TABLE SHOWING AVERAGE IMPORTS AND AVERAGE CUSTOMS, REVENUE UNDER "FREE TRADE" ASCENDENCY, AND THE SAME DURING PERIODS WHEN PROTECTIONISTS WERE IN POWER.

Years.		Amount Imports per Year.	Average Revenue from Customs.	Ratio of Revenue to Imports.
				Rev. *Im.*
1821-3 Inc.	3 years F. T.	$ 50,758,073.33	$ 16,557,543.17	$1 to $3.06
1824-33 Inc.	10 years Protect'n.	66,515,935.30	23,066,272.30	1 to 2.88
1834-41 Inc.	8 years F. T.	108,407,276.00	17,183,741.60	1 to 7.03
1842-46 Inc.	5 years Protect'n.	91,126,945.40	21,331,220.03	1 to 4.27
1847-61 Inc.	15 years F. T.	239,167,587.00	47,605,530.45	1 to 5.02

Or, varying the mode of expression, we find that, from 1821 to 1823, a "tariff for revenue" collected only $3.26 of revenue on every $10 worth of imports, while in the next ten years, over most of which a protective tariff extended, we collected under a protective tariff $3.47 of revenue on every $10 worth of goods, increasing our average importation by $16,600,000 per year, our average revenue by $6,500,000 per year, and the ratio of revenue to goods imported. From 1834 to 1841, inclusive, eight years of free trade, and of disaster caused by excessive importations, our average importations nearly doubled, while our tariff for revenue fell off nearly $6,000,000 per annum, and we collected only $1.46 of revenue on $10 of imports. In the five protective years from 1842 to 1846, inclusive, our importations were less by $16,000,000, and the duties collected more by $3,000,000, the ratio of duties rising to $2.34 per $10 of imports. From 1846-61 the imports were made large by our great supply of gold from California, by our increased opening up of Western lands through our extending railways, by the great demand for our exports occasioned by the Irish famine of 1846-9, monetary crisis in England in 1847, repeal of English duties on bread-stuffs in 1847-9, Crimean war in 1851-4, French, Hungarian, and German revolutions in 1848, and the like. But the revenue on every $10 of imports fell to $1.98, thus showing that in no instance have duties "for revenue only" been so productive of revenue on a like volume of importations nor so productive absolutely as duties levied for both revenue, and protection. In the light of these facts, Mr. Mill's "obvious truism," that "duties which protect can produce no revenue and duties which produce revenue can afford no protection,"* becomes a practical falsehood. From 1861 to 1870, under protective tariffs the revenue advanced from $39,000,000 to $180,000,000, each increase of protection being attended by a steady rise in the ratio of the revenue collected to the goods imported. In 1861 we collected $1.18 of revenue per $10 of imports; in 1870 it is $5 of revenue per $10 of imports.

Under the "free trade" tariff of 1857-60, the government collected, in the latter year, on an importation of goods to the value of $334,350,453 a revenue of only $39,582,125.64, or $1 of revenue to $8.50 worth of goods imported. Under the tariff known as the Morrill or war tariff, the rates were increased at nearly every session of Congress during the war, especially on iron and steel,

* Mill's "Political Economy," vol. 2, p. 538 (book v, chap. x. sec. 1).



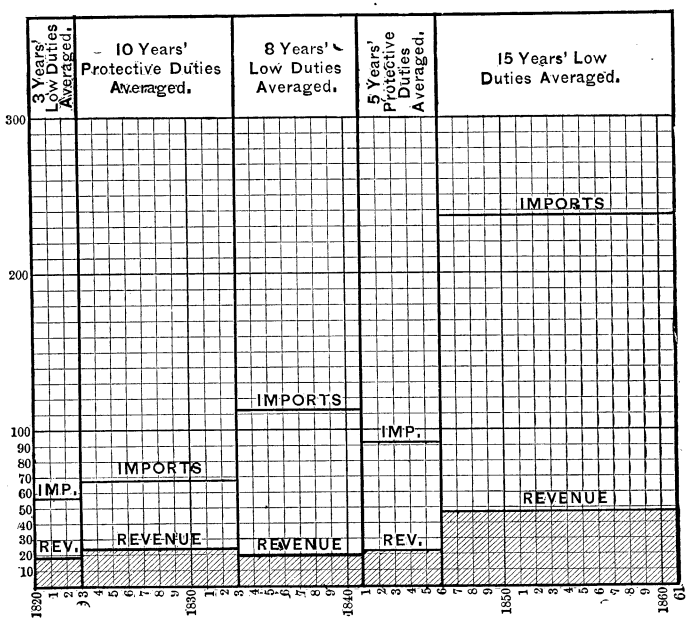
Charts of Total Revenue of U.S., of Expenditure, and of Proportion of Revenue derived from customs to that derived from all other sources from 1792 to 1887.

Customs revenue } *Total revenue*
All other sources of revenue }
Expenditure by Government

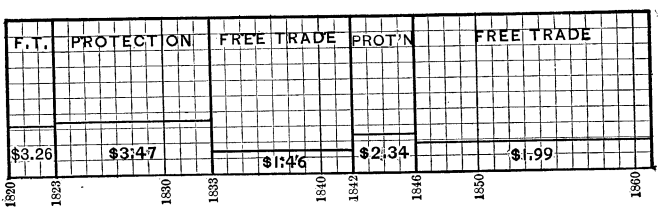
Chart A is on scale of $10,000,000 to the section line.
Chart B is on scale of $1,000,000 to the section line.
Chart A distinguishes customs from other sources after 1863.
Chart B distinguishes customs from other sources prior to 1863.

cottons and woolens, and we collected in 1869 a customs revenue of $177,151,126 on a total importation of $415,569,872, being $1 of revenue on every $2.37 of goods imported. Purely in productiveness of revenue the tariff of 1869 was three and a half times more effective than the tariff of 1860. To collect the revenue

RATIO OF REVENUE TO IMPORTS DURING 40 YEARS. SCALE, $10,000,000 TO SECTION LINE.



RATE OF REVENUE COLLECTED ON EVERY $10 OF IMPORTS.



of 1869, under the tariff of 1860, would have required an importation of foreign goods to the value of $1,200,000,000 per annum, a quantity whose importation was practically a three-fold impossibility, because (1) Europe could not take so large a quantity of our products as would be required to pay for them; (2) we could not produce them, and (3) the importation of so large a quantity

of manufactured goods would have completely destroyed our own manufactures. The following table shows the rapid increase in the efficiency of the tariff during this period :

Year.	Value of Merchandise Imported.	Revenue.	Ratio of Revenue to Imports.
1861	$334,350,453	$39,582,125.64	$1 to $8.50
1862	205,819,823	49,056,308.00	1 to 4.01
1863	252,187,587	69,059,942.00	1 to 3.65
1864	328,514,659	102,316,153.00	1 to 3.21
1865	234,434,167	85,928,260.00	1 to 2.76
1866	437,638,966	160,000,000.00	1 to 2.73
1867	389,924,977	176,417,810.88	1 to 2.43
1868	357,436,440	164,464,500.00	to 2.11
1869	415,569,873	177,151,126.00	1 to 2.34

The following table presents the contrast between a term of years of "free trade," and the like term of protectionist years :

COMPARATIVE POWER TO COLLECT TAXES UNDER CONTRASTED TARIFF POLICIES.

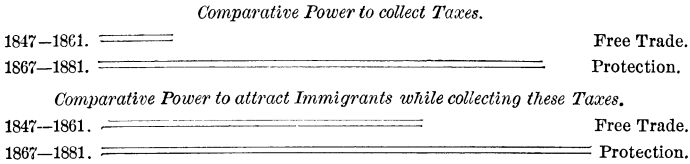
Under Free Trade.		*Under Protection.*	
Years ended June 30.	Total Ordinary Receipts.	Years ended June 30.	Total Ordinary Receipts.
1847	$26,467,403.16	1867	$462,846,679.92
1848	35,698,699.21	1868	376,434,453.82
1849	30,721,077.50	1869	357,188,256.09
1850	43,592,888,88	1870	395,959,833.87
1851	52,555,039.33	1871	364,431,104.94
1852	49,842,815.60	1872	365,394,229.91
1853	61,587,031.68	1873	322,177,673.78
1854	73,800,341.40	1874	299,941,090.84
1855	65,350,574.68	1875	284,020,771.41
1856	74,056,699.24	1876	290,066,584.70
1857	68,965,312.57	1877	281,000,642.00
1858	46,655,365.96	1878	257,446,776.40
1859	52,777,107,92	1879	272,322,136.83
1860	56,054,599.83	1880	333,526,610.98
1861	41,476,299.49	1881	360,782,292.57
Total . . .	$779,605,256.45	Total . . .	$5,032,539,138.06

Whether this enormous increase of revenue, under protective duties, was attended by greater disadvantages or advantages to the industry and prosperity of the country, may more properly be considered when we come to discuss the merits of protection as an economic policy, *i.e.*, as it affects the people.

No one test of the general prosperity of a country, however, is more satisfactory than the rate of immigration into it, as

that measures its general economic desirableness, relatively, to all competing countries. In the period of low duties, many extraordinary exterior circumstances concurred to stimulate immigration, such as the new gold crop of California, the new railroad epoch in the United States, the Irish famine, Crimean war, and revolutions in Europe. In the protective period all these were wanting, and no prominent cause but the prosperity induced by protective policies, and an abundance of paper money, existed to invite population. Yet the immigration in the first period, viz., 3,817,931, was far exceeded by that in the second, 5,998,334. In short, in a period of high duties, when the amount of revenue collected was 6½ times greater than under low duties, the immigration was still twice as great as under the low duties, indicating a condition of labor capable of attracting twice as many persons. These facts are shown in the diagram:

Comparative Power to collect Taxes.



As a mere fiscal policy for the promotion of revenue, the foregoing figures, embodying much of the experience of the United States, show that tariffs designed to protect do, in the aggregate, produce most revenue.

The state and local taxation rests, in most of the States, on land and its improvements, and fixed capital generally, aided by license taxes on the sale of liquors at retail, taxes on personal property, and in some States on railways, and on certain occupations. It is all, or nearly all, claimed to be direct taxation, as that word is used by the economists, *i.e.*, it can not, it is thought, be transferred, by the party that pays it, so that its ultimate burden shall rest on another.

Whether, however, taxes on land are paid by the landlord, or by the occupier, has of late been much disputed. In England, where the occupier pays them, in the first instance, it is often asserted that ultimately the burden is shared by the land-proprietor. In America, where they are at first paid by the land-owner, it is often asserted that he is able to add them to his rents. This can not be proven, and is very doubtful. The rates of land rent are determined by the competition of tenants to hire, and by

the average earnings of capital in other occupations. For landlords are presumed not to seek to extend investments in real estate, beyond the point where as large an average return can be got from the capital invested, in the purchase both of land and improvements, as could be derived from the same capital, invested in other forms of property, which would require no more care.

It is by no means clear that laying the taxes on land either increases their value to tenants, or increases the returns from the general avenues for the investment of capital.

Rents are very much lower in England, where land is untaxed, than on like values of property in France and America, where it is taxed. But there are too many factors, more potent than this, to justify attributing it to this chiefly.

Hardly any of the state taxes rest on consumption. Nearly all aim to tax capital. This is the outcome of universal suffrage. In the rural districts about one-half of the voters are taxpayers, under a system which aims to tax capital and land only. In the cities, only from one person in five, to one person in twelve, is a taxpayer. The effect of having taxes laid by the non-property-holders, and paid by the property-holders, is to infuse a communistic spirit into all tax voting, the non-taxpaying classes combining together to have as much money expended as they can, since, the more money is expended, the greater their chance of getting some of it.

A school district, in one of the suburbs of New York, had, a few years ago, so many wealthy taxpayers, who were too aristocratic to send their children to any public school whatever, and so many voting parents of poor children, determined to give them all the accomplishments of a fashionable education, at the cost of their wealthy neighbors, that by introducing instruction in modern languages, music, etc., the cost of instruction was brought up for a time to $600 per pupil per year, a cost greater than the wealthier parents were paying, for the tuition of their own children, at Harvard or Yale.

Thus, the theory of Adam Smith that, where taxes are most certain in their incidence, they will be most economically laid and expended, undergoes an explosion, due to the fact that Smith made no account of the interest which should govern their laying or expenditure. It was because, in this case, the tax was certain to fall on the rich, and they were in the minority, and was certain to benefit the poor, and they were in the majority, that the tax was laid wastefully.

The chart shows that nearly the whole means of maintaining the National Government, from its foundation to the present time, have been derived from duties on imports, except that in 1835 to 1836 nearly half the expenses of government were paid by sales of public lands, and since 1862 the revenue from the internal or excise taxes was for several years greater, and is still nearly as great, as from duties on imports. Both these forms of taxation rest on consumption, except as they may in certain instances rest on the producer of the taxed product. The degree in which they so rest will be discussed in chapter XV.

Taxes on alcoholic beverages and tobacco are so popular in the United States, owing to the hostility to the accustomed use of these two articles, on moral and hygienic grounds, that it has thus far been dangerous to any politician to advocate their repeal, notwithstanding they were imposed only as war taxes, and the revenue derived from them is a surplus and a burden which it is desirable to get rid of, and which interferes with the most happy adaptation of our revenue system to the real wants of the country. Whether the taxes on liquor and tobacco do in fact discourage their use, in any degree, is open to question. The prevailing modes of partaking of both, by the custom called "treating," imply that the person who pays for them usually does so from some motive of hospitality or ostentation among his friends, or to cultivate the good-will of persons with whom he desires to ingratiate himself. All these purposes are more completely subserved by the dearness of the article, rather than by its cheapness. Perhaps the masses of the buyers of liquors and tobacco prefer them to be high-priced rather than low-priced. Human nature has never wholly escaped that infatuation for the ostentatiously expensive, which induced the gourmands of Rome to melt pearls into their wine, not because they improved its flavor, but because they increased that display of cost which was a chief purpose in all their entertainment, or to make their soups of the livers of singing birds because they were high-priced.

It is certain that an indirect effect of the high taxes on wines of every kind, is to promote largely their adulteration, and to increase the difficulty of making any use of wine for medical purposes, which would be an economic consideration, in case it shall be finally determined that wine has any medical utility.

Nor have the Americans ever adopted the practice, which prevails in England, of destroying the flavor of high wines, or alcohol needed for chemical and manufacturing purposes, without destroy-

ing its utility, by infusing into it a portion of *wood-naphtha*. It thus becomes methyllated spirits, which in England are free of the excise tax. Here, therefore, alcohol used in the mechanic and manufacturing arts is unnecessarily and wastefully taxed, while many good objects, and no bad purposes, would be served by freeing it from tax.

182. Taxation in Great Britain—Local.—The total taxation of the United Kingdom of Great Britain and Ireland for the year of 1872–3 * was £102,434,866, or £3 3*s.* 2*d.* per head of the population.† Of this the local burden was £40,991,770, and the national taxes were £79,763,298. Of the local taxation 33.9 millions were contributed by England and Wales, 2.8 millions by Scotland, 5.1 millions by Ireland. The following is a complete statement of the receipts for local purposes :

Amount of Direct and Indirect Taxation, and of other Sources of Receipts for the purposes of Local Expenditure.

Levied by Rates.	England & Wales.	Scotland.	Ireland.	Total.
Direct	£18,619,378	£1,683,008	£2,514,691	£22,017,677
Indirect, from Dues, Tolls, etc.	3,939,238	455,454	300,224	4,694,916
Total of Taxes ...	.....	.....	.....	£27,511,993
Other Sources of Receipts.				
Sales or Rents of Property	923,001	285,060	30,961	1,239,032
Government Contributions	962,895	123,738	1,900,059	2,087,592
Loans	6,583,812	145,653	169,995	6,899,460
Various Sources	2,926,984	138,763	187,946	3,253,693
Local Taxes	22,558,616	2,148,462	2,814,915	....
Total	£33,955,308	£2,831,676	£5,103,876	£40,991,770

The rates are taxes paid by the occupier of lands and houses, and for the collection of which a warrant issues authorizing only a seizure of the occupier's goods and chattels. They are frequently spoken of, in English economic works, as a tax on lands, but differ wholly from an American tax on land, in the fact that for delinquency in the payment of the latter, the title to the land itself is sold, while, for failure to pay the English rate, only the goods of the occupant are distrainable. This distinction probably determines the incidence of the tax. The English rate-payers will never succeed in putting the burden of their rates in the first instance on the land-owner, until they enact that the warrant issued to collect the tax shall sell the land itself, and not the goods of the occupier.

The rates levied are liable to be increased in number, by any act of parliament which discovers a new local object for which

* "Condition of Nations," by Kolb, translated by Brewer, p. 61.

† Each pound sterling equals $4.87.

money needs to be expended, or diminished by any act consolidating or repealing previous rates. They consist of two classes, viz.: rates levied in primary districts, such as a parish, which may be likened to what Americans would call township taxes, and rates levied in aggregate districts, such as a county.* There are twelve principal kinds of parish rates, viz.: (1) the poor rate, (2) the highway rate, (3) the burial board rate, (4) the lighting and watching rate, (5) the general district rate, (6) the sewerage rate, (7) the towns improvement rate, (8: the animal contagious diseases rate, (9) the church rate, (10) the sewers rate, (11) the general sewers rate, (12) the drainage, embankment, and enclosure rates. This is by no means a complete list, as Mr. Fawcett† mentions also a public library and museum rate, parish improvement rate, borough lunatic asylum rate, borough library and museum rate, borough baths and wash-houses rate, borough improvement rate, and borough burial-board rate. Mr. Fawcett regards these rates as a feasible mode of carrying out, not only gratuitous instruction, and all forms of special education, but state emigration, provision for children whose support is found inconvenient to their parents, the encouragement of co-operative associations, the purchase of land from landlords for the tenants, and advance of capital to work the land, and other forms of socialistic relief. This constantly increasing demand upon the rates, he says, is encouraged by the opinion that the wealth of England is so great that there is no need for economy.

Besides the parish rates, there are the county rates, which are expended chiefly for county bridges, gaols, shire halls, county lunatic asylums, and county police; the hundred rate for making good the damages occasioned by a riot; the borough rates which are levied in cities for like purposes to those for which county rates are levied in the country.

Mr. Chalmers‡ says that local government in England may be fitly described as consisting of a chaos of authorities, and a chaos of rates. With few exceptions, all the various areas intersect, and overlap. A very jungle of jurisdictions is brought about by the circumstance that all these areas are governed by different authorities, elected or selected at, different times, by different means or bodies. These defects, and difficulties, have resulted from the

* Report of select committee on local taxation, Goschen, 152.

† "Manual of Political Economy," p. 607.

‡ "Local Government." The "English Citizen Series," by Mr. Chalmers, McMillan & Co., 1883.

English habit of legislating by piecemeal, the shortcomings of existing institutions being remedied, from time to time, by a species of patchwork. This system, or want of system, it is not altogether easy to replace, numerous vested interests being enlisted in favor of its permanency. Under it, offices are unnecessarily multiplied, and, there not being a redundance of talent available for the local public service, the latter suffers in an appreciable degree. Under the circumstances, it is not singular that confusion and extravagance should be the characteristic features of the whole system.

The paupers number 843,000. They multiply in proportion to the adequacy of the provision for their support, and the unwillingness of the government to protect industry, though they support the idle. The rule is universal, that if taxpayers convert their backs into a comfortable saddle, they will always find persons obliging enough to ride, particularly where walking is made precarious and difficult. The paupers cost a sum equal to nine-tenths of the amount required to maintain the navy and fleet* equipped with all the appliances of modern warfare, and the number of adult able-bodied paupers is about the same as that of the army and navy combined, excluding soldiers serving abroad.

There is no system of town government, and no town budget. The areas from which taxes are collected overlap each other in endless confusion. No particular local area can accurately tell how much it pays, except for some one purpose, for when it comes to pay for a different purpose it will find itself part of a different area, and its rate for that purpose will be levied by a different board, or by different officers at a different time, and on a different valuation. Very few of the towns are incorporated, and those that are incorporated are not thereby delivered from the jurisdiction of conflicting local boards. Mr. Goschen says: "There is no labyrinth so intricate as the chaos of our local laws." Mr. Chalmers says: "There is neither co-ordination nor subordination among the numerous authorities that regulate our local affairs."

Some attempt has been made to lessen extravagance in the levying of local rates by causing the local boards, which levy these various rates, to be elected on the plural system, so as to accord to taxpayers a voting influence proportionate to their burdens. For instance, the board of guardians which disburses the poor rates

* Cost of Navy for 1878, £10,978,592 ("Condition of Nations," Kolb, p. 56).
† Cost of the Poor, 9,771,000 (Goschen on "Local Taxation," p. 15).

consists of the justices of the peace resident within the union (district under one set of officers for poor relief), and of a certain number of elected guardians who are voted for by the rate-payers, upon a plural scale, under which both owners and occupiers of property renting for less than £50 have one vote, if renting for £50 and less than £100 two votes, if for £100 and less than £150 three votes, and an added vote for each £50, up to six votes, where the increase of voting power stops. Members of the various boards are required to possess certain property qualifications, those of a town councillor being the ownership of real or personal property of the value of from £500 to £1,000.

183. General Taxation in Great Britain.—The principles, which govern the adjustment of the general tax system of Great Britain, are so often travestied in their statement, that a more careful survey of the facts, than is usually made, should precede any discussion of their principles. Each year's budget is nearly alike. In 1882 the total revenue, national and local, was £148,371,480, or in dollars $741,857,400, to a total population of 35,262,762. The following budget for an earlier year may serve our use:

GROSS PUBLIC REVENUE.

	Year ending March 31, 1878.
Customs	£19,969,000
Excise	27,464,000
Stamps	10,956,000
Land Tax and House Duty	2,670,000
Property and Income Tax	5,820,000
Post Office	6,150,000
Telegraph Service	1,310,000
Crown Lands	410,000
Interest on Advances and Miscellaneous	5,014,298
Total	£79,763,298

GROSS PUBLIC EXPENDITURE.

Interest and Management of National Debt	£28,412,750
Civil List and Civil Charges	16,387,139
Army	14,607,445
Repayment to Army Funds	500,000
Army Purchase Commission	504,719
Navy	10,978,592
Charge of Collection of Revenue	7,012,850
Total	£82,403,495

Since 1840 the gross revenue collected from duties on imports has never been above 25¾ millions of pounds, nor below 20, until 1877, when it fell to 19 millions. On the whole, however, the average customs revenue has declined, in the forty years, from the larger of these figures to the smaller, or about one-fifth,

and is still declining. The rate of this decline is shown by the following figures:

In 1858	£23,382,141	In 1870	£21,499,843
" 1860	24,391,084	" 1872	20,225,892
" 1862	23,692,955	" 1874	20,323,325
" 1864	23,234,356	" 1876	20,020,000
" 1866	21,302,239	" 1877	19,922,000
" 1868	22,664,981	" 1878	19,969,000

In the year 1861, of the total customs revenue of £23,500,000, sugar yielded nearly £6,500,000, tobacco over £5,500,000, spirits and wine nearly £4,000,000. In 1870, sugar yielded £5,396,561. In 1871 the duty was reduced, and in 1874 it was repealed. For fifteen years, from 1863 to 1879, there was an average annual increase, in the yield from the same rate of duty on tobacco, of £158,140, thus nearly compensating for the repeal of the duty on sugar.

As the post-office represents an expenditure fully equal to its earnings, this item of £6,150,000 may be estimated as not forming any part of the actual revenue. The government is supported therefore by duties on imports, excise (on the domestic manufacture and sale of liquors and tobacco), by stamp duties and tax on incomes.

Of the duties on imports at present collected, about one-half ($45,000,000) are collected on tobacco, and about one-half of England's importation of tobacco, to wit, 30,000,000 pounds, comes from the United States. The duty ranges at from 3*s.* 6*d.* (87 cents) sterling, to 3*s.* 9*d.* on the leaf, to 5*s.* ($1.20) on the manufactured plug tobacco, cigars, and snuff. The duty is prevented from being protective of the cultivation of the plant by a statute of 13th Victoria, prohibiting the cultivation of the plant, except in the drug gardens of three universities, on an area not exceeding one pole of land.*

* Shadwell, an English economist ("Pol. Econ.," p. 610), says concerning this provision: "The celebrated order of the Dutch government to destroy the spice trees in certain parts of its East Indian possessions has always been cited as an instance of the prompting of a narrow commercial selfishness, and Humboldt could give no stronger instance of the arbitrary tyranny of the Spanish government than its order to the Viceroy of Mexico to destroy the vines and olive trees which had been planted in that colony. Yet the first of these was certainly, and the second may possibly have been, not a whit more tyrannical than the prohibition which is still enforced by our own government against the cultivation of tobacco in the United Kingdom. It is not simply the legacy of a distant age, but the experiment of allowing its cultivation has been fairly tried and abandoned for fiscal reasons. In England, indeed, it was prohibited almost as soon as it had commenced, but in Scotland it was permitted down to the middle of the last century, and was suppressed on account of the difli-

The difference of thirty-three cents per pound by which the duty on the manufactured article exceeds the duty on the leaf is prohibitory of the importation.* Nor is there any excise (internal revenue) duty on British manufactured tobacco to countervail the protective effect to the British manufacturer, of this difference of duty.†

While British writers usually speak of the specific duty on the leaf, as equivalent to an *ad valorem* duty of 500 per cent., *i. e.*, that the duty is five times as great as the ordinary foreign price of the product, this assumes that the foreign price of the product is 8*d.* sterling, or 16 cents per pound. The price at which the tobacco shipped from the United States is invoiced is, however, only $6\frac{2}{3}$ cents per pound, and on this invoice price the English duty instead of being 500 per cent. would be 1,250 per cent., while the duty on cigars and the higher forms of the manufacture would be about 2,000 per cent., of which 400 per cent. would be protective to the British tobacco manufacturer.

While the law governing the tobacco duty suppresses the domestic production of the leaf, in order to avoid protecting the Irish farmer, it still maintains in behalf of the British manufacturer a strictly protective duty, four times higher in its protective

culty of enforcing the payment of the excise duty upon home-grown tobacco. Ireland still remained free in this respect; but here again, as in the case of Scotland, as soon as the cultivation of tobacco assumed any large proportions it was prohibited by the government. It was finally suppressed by the Act 2, William IV., cap. 20, "the vigorous enforcement of which," says Mr. McCulloch, "notwithstanding the clamors it occasioned, was highly creditable to the government (p. 238)." This prohibition is still made a matter of complaint by Irish politicians; and as some parts of Ireland are well qualified for tobacco culture, it is much to be regretted that so poor a country should have been deprived of one chance of retrieving its fortunes. It does not appear why English officials should find it more difficult to levy an excise duty on tobacco than their brethren in France, where the culture of tobacco is permitted. Perhaps the real secret of the difficulty is the exorbitant height of the duty, which, as it amounts in some cases to 500 per cent., holds out a great temptation to smuggling, and as long as this temptation remains the revenue will always be defrauded, whether it is collected by custom house or by excise officers.

* On this point Chambers' Encyclopedia, Art. "Tobacco," says: "Tobacco, owing to the high rate of duty when in any manufactured form, is mostly imported in the leaf; but small quantities are brought in chiefly for re-export, in various states of manufacture." Our customs returns for 1882 show an export from the United States to England of 299,000 cigars, worth $10,151, no snuff, and all other manufactures of tobacco only $604,141.

† On this point Chambers' Encyclopedia, Art. "Excise," says: "The only articles on which excise duties are now charged are spirits, malt, sugar, chicory, rice, horses, and the passenger receipts of railway companies." Those who affirm, therefore, that the heavy import duties, provided by the British tariff on a few articles, are prevented from being protective by countervailing excise duties, are in error as to the first and leading item.

quality than any protective duty in the American tariff, and taxes a raw material of manufacture, by a duty from twelve to fifteen times higher than any American duty.

Nor is either the protective or the obstructive principle absent in other features of the British tariff and excise. The duty on rum yields $11,150,000, while the molasses, and other materials from which rum is distilled, come in free. There is a difference between the excise duty on home-made spirits, and the import duty on those imported from abroad, which acts as a protective duty in favor of English distilleries.* Brandy pays duties amounting to $7,935,000 and wine $7,000,000. While British grapes are not a marked success, their customs laws seem to aid materially to strengthen the manufacture and sustain the high reputation of British brandy. From ninety to one hundred fluid articles, chiefly patent medicines, from America, pay a duty of $3.36 per gallon.

In proportion to population, Great Britain collects $3 per capita of revenue from customs duties, as against the same sum collected by the United States. None of its duties rest on food or manufactured articles of wood, wool, silk, cotton, linen, or the metals. To collect her revenues, Great Britain is divided into 133 customs districts, each with a collector and subordinates, against about 128 districts for the vast area of the United States. In London alone there are about 1,550 customs officials and in Liverpool about 850. The American system employs 4,137 men in all, and involves a total cost for collection in 1880 of $5,995,878.06. It is not believed that the force employed or the total cost varies materially under the British and American systems, in proportion to the sum collected. Summing up the three classes of duties on which we have made no comment, a well-informed writer says, "From the stamp duties, land and house tax, and income tax, not charged in the United States, Great Britain collects $116,000,000 annually. Every bill of exchange or re-

* Shadwell, "Pol. Econ." p. 601, says: "The higher rate of duty on spirits is adopted as a compensation for the restrictions upon native distilleries, which, according to them, placed them at a disadvantage in competing with foreign rivals. But H. Fancher disputes the validity of the excuse. One of the excise regulations which is compensated in this way is the prohibition against brewing and distilling at the same time, but he denies that there are any manufactures on the continent who, by being allowed to brew and distill at the same time, gain any advantage over their English rivals. If this is so it is obvious that the difference between the customs and excise duty on spirits acts as a check on importation, and must, to some extent, relieve the native manufacturers from the wholesome influence of competition and subject the consumers to a corresponding loss."

ceipt, all professions, trades, and incomes, exery deed, probate, legacy, house, carriage, servant, gun, or dog must pay." A laundry woman, who sent her washing home by her infant son, was made to pay a porter's license on the boy. But the nobleman who can ride 125 miles in a right line, without once getting off his own land, may congratulate himself on the fact that men of his class have had such an influence in shaping the system of taxation, that no warrant for the collection of taxes, and no execution for debt, can sell a foot of this land from its proprietor.

184. India—Taxation by Profits of Enforced Foreign Trade.—New devices, in government and society, often exist for long periods, before they come to be recognized by their right names. To sustain a vast empire, highly free and liberal as to its conquering elements, but equally despotic and cruel toward its conquered, without any other taxation on the subject peoples than that derived from the profits on their trade, is a comparatively new device in government, and it is not wonderful that it should not be fully understood.

Many are reluctant to admit that the profits of trade can be a mode of taxation. In a small way, laws have here and there been passed, in America and England, which assume that when a merchant obtains a certain degree of power over his customers, sufficient to compel them to trade only with him, the profits of voluntary trade may often become a severe form of despotic swindling. Legislators perceiving this, have forbidden the system, on the part of manufacturers, of paying men in store orders, for goods to be purchased at the employer's store, and at his prices, since the buyer, or workman, is thus deprived in the purchase of his goods of all the healthy effects of competition.

The British system of taxing its outlying empire, and especially the Mohammedan, heathen and barbarian portions of it, by simply collecting from them the profits of a species of trade more or less enforced by her military arm, is a device of this kind. No sketch of British taxation would be faithful to the subject, which omitted to trace her system of sustaining military and financial governments, in a more or less acute form of armed coercion, or cut-throat loans over Ireland, Turkey, Egypt, India, China, Japan, South Africa, the islands of the Indian Archipelago, Australia, New Zealand, Tasmania, Cyprus, Malta, and even Brazil, and Mexico, for the sake of the profits that can be reaped from their trade. Great Britain has now 260,000,000 of people under her sway, of whom 220,000,000 are heathens who do

not desire her kindly and officious interposition in their behalf. Yet from all those people she gathers no taxes by that name, for the support of her imperial government. Since about 1846, the well-understood policy of Great Britain has been to require each of her provinces, Canada, Australia, India, the Cape Colony, etc., to raise within itself the revenue required for its own government expenditures and national defense, without contributing any thing toward defraying the cost of her own supervision of their affairs, though much of the attention of the imperial government is given to guarding its ascendency over them. Its own compensation for the enormous cost at which it stands ready at all times to preserve its dominion over them, with the last drop, if need be, of British blood, is found in the two privileges of "furnishing Englishmen with a career,"* in governing these outlying peoples, and in furnishing English manufacturers with a market for their goods.

The British Empire is, therefore, maintained by military force, for the sake of the profits involved in the system of trading that arises between a conquering race of shop-keepers, bankers, and artisans, and the world's conquerable races of borrowing farmers, peasants, and laboring barbarians. As government may, in military periods, accept as a tax the military services of its subjects, or the rents of their land, or their gifts, as of Peter's Pence to the Pope, and so the real taxation is concealed under another name, so England's taxation by an empire of shop-keepers, existing only for purposes of trade, appropriately takes the form of profits of trade.

"One-seventh of India," says J. Seymour Keay,† "was conquered by the English by force; six-sevenths were obtained by breach of trust." Native princes were told that they needed and must have the protection of British troops, and immediately upon accepting the protection, they became prisoners in their own palaces. Native merchants were supplied with every thing they desired to sell, so cheaply by British manufacturers, that they ceased to be customers of the Hindoo manufacturers and artisans, though the latter had invented the loom and the cotton thread, and the former had only substituted coal and steam, as workers, for human muscle.

Anterior to the rule of the British in India, that country included, in its population, all ranks and grades of wealth, except

* The language of Wm. E. Gladstone, in defending the British occupation of Egypt.
† "Spoliation of India." See *Nineteenth Century* for July, 1883.

the famine-stricken and the suffering. Its industry had, for generations, been a success, in a material point of view. It had capitalists, as well as ryots (peasant farmers), manufacturers of looms and fabrics as well as cultivators of rice, merchants, traffickers, great landlords, nobles, rich priesthoods, scholars, philosophers, palaces, temples, bankers, money-lenders, and all the appliances of a vast and active interior commerce, engaging the activities and satisfying all the wants of a population larger than that of all Europe. To-day, after a career of robberies of capitalists under pretense of extorting tributes, indemnities, confiscations, and fines—after the people have been mown down like grass by decimating famines that recur every few years, the country contains virtually a population of 200,000,000 paupers, with hardly a native employing capitalist, or landholder, where formerly there were hundreds, —to advance the food required for the employment of any large force, to till the soil, or undertake any other enterprise. In a single famine, and in a single province (Mysore), in 1877, out of a population of 5,000,000 fully 1,500,000 died of famine. The total number of persons who perished in the various famines, induced by the dislocation of native commerce among the people themselves in the interests of a foreign trade, probably exceeds the entire present population of England.*

The Indian people pay a revenue of $350,000,000 annually, for a government wholly alien in its spirit and aims. Of this $150,000,000 is paid in salaries to Englishmen, civil and military. In the civil service the average salary of a native officer is $100 a year ;

---

* Mr. Martin Wood says: "In the fifty-two years ending 1854 there was a record of thirteen or fourteen famines, with a probable loss of life of 5,000,000. But in the period of only eighteen years from 1860 to 1878 there were sixteen famines, with a loss of life of nearly 12,000,000. Mr. Wm. Digby gives famines of 1861 to 1870, six in number, deaths, 4,585,000; and from 1871 to 1880, six in number, deaths, 6,736,420."

In *Journal of the Society of Arts*, February 26, 1886, is an essay on "Historical and Recent Famines in India," by F. C. Downs, containing a catalogue of all known Indian famines. The Famine Commission estimate that for the two years 1876-8, in a population of 190,000,000, there were 5,250,000 deaths in excess of what would have occurred if the seasons (supplies) had been ordinarily healthy (abundant).

General Prendruft estimated the government had expended £24,500,000 in works of irrigation, all of which had paid good dividends, and had sunk £23,500,000 in hopelessly trying to mitigate famines in which at least 10,000,000 lives had been lost during the century.

In some of these famines the number of bodies exposed on the highway was so great and their appearance so hideous that even the horses of the British officers would not ride by them. The stench was so pervading that sappers and miners were sent ahead to bury the bodies before the governor-general could pass through. In the corruption of these exposed bodies the Asiatic cholera, called by the Hindoos "The British Cholera," originated.

the average salary of an English officer is $6,000 a year. Out of a total white population of 68,000 persons, exclusive of the army, 25,402 are governing officers, and their salaries amount to $63,-882,865, while 11,231 native officers draw in all less than $11,000,000.

A native army of 125,000 men is officered by 2,800 British officers, while an English army of 64,000 troops, with 3,200 British officers, is required to hold the native army to its work. The mercantile profits of English traders in India are upwards of $70,000,-000. A heavy burden of railway loans, and private loans, renders all parts of the population tributary to London. The money that is loaned to them is but a small portion of the profits that have been made out of them. Whole cities in England have been built up on the profits of conducting, 17,000 miles away, the exchanges of food for cloth and iron which the people of India could, far more economically and securely, have conducted with each other. India cotton was shipped from the city of Calicut, where the manufacture of calicoes began, to Manchester, to be there spun and woven after designs borrowed from India, and thence shipped back, 34,000 miles in all, one-seventh of the distance to the moon, to be sold to the very ryots who were deprived of bread by the substitution of these foreign wares for their own.

Justice is administered in the courts, chiefly as a means of promoting the collection of revenue, by the sale of stamps. The average annual income of the majority of the people is $10, out of which they pay in taxes $1.50. The cultivation of 120,000,000 acres of land is taxed directly $105,000,000, though the value of the crops derived from the land is only $7 per acre. All the land of India is nationalized, and is taxed to nearly the value of the ground rent. At all times a large proportion of the population is on the verge of starvation. More frequently than in any other part of the world, great famines set in, and the people perish by millions. Meal boiled in water, or boiled rice, is all the food the agricultural classes desire. The government collects on salt a direct tax of 2*s.* 6*d.* on every pennyworth, or 3,000 per cent.--a sum which represents the value of a laborer's services for a month. It is collected from the poorest classes as, a poll tax, without regard to whether they have made any salt or not. The horrors of the salt tax are incredible. Instances have occurred in which the laborer, who, in digging a foundation for his hut, found grains of saline earth, and laid them in the sun to dry, was lashed for eating the dried earth without paying the salt tax. The ryot who

scooped out a channel for the sea-water with his hands, and sucked up the salt crystals from the sand, has been pursued by the revenue officer, and lashed for the back tax.*

An important difference between the English spoliators of India and all previous conquerors, whether Parsee or Mohammedan, was that the earlier conquerors became part of the country, and their spoils of conquests, fines, and rents of land, remained and were expended in the country. The English spoliators stayed only long enough to grasp their plunder, and then return to England. Since the Suez Canal has shortened the route to India the average stay of Englishmen in India has been still more transient. Especially is it far more destructive of the industries of the country, to pay a land rent of one-half or more of the raw product of the soil, to foreign, than to domestic landlords.

In 1831, the native manufacturers and dealers in cotton and silk piece goods, the fabrics of Bengal, petitioned the British government, showing that of late years they had found their business nearly superseded by the introduction of British fabrics, to the suppression of the native manufacture. They said the fabrics of Great Britain came into Bengal free of duty, while the manufactured cottons of Bengal paid 10 per cent., and the manufactured silks 24 per cent., to get into Great Britain. They very rashly, but politely, asserted their confidence that "no disposition existed

* Mr. Keay, in "Spoliation of India," *Nineteenth Century* for July, 1883, says: "I despair of giving any adequate idea of the miseries inflicted on a helpless people, too poor to consume aught save the bare necessaries of life, by this method of compelling them, on pain, as it were, of death itself, to contribute to the support of our expensive government. Even to wash a little salt out of the earth is held to be a heinous crime. Here is a story vouched for by a member of the Madras Civil Service, and quoted in a recent publication:

"'A laborer in Madras, having shifted his place of residence, made himself a new mud hut. When he came to occupy the hut, he found the earth floor strongly impregnated with saline particles. He scraped up some of the dirt, separated the parts as well as he could, and put the salt he had collected outside to dry. This was observed by a revenue collector, and the man was proceeded against. He was imprisoned, and was condemned to receive some lashes.'

"The mass of the poverty-stricken classes in India dare not risk such punishments as these. For bare life, however, salt must be had. It is a crime to separate the precious saline particles from the earth, but it is not a statutable offense to swallow the salt along with the earth itself. Nothing remains, therefore, for many poor people, but to consume the revolting compound. Darwin has familiarized us with the fact that there is a class of worms which gain nutriment by passing the soil through their tube-like bodies. It has remained for our British Government of India to reduce large numbers of human beings to the same expedient. In the state of Hyderabad, where I have lived for the last twenty years, the people are entirely dependent on British salt, and great mortality is caused among the poor by their eating earth for the sake of its saline flavor. The practice is common throughout India."

in England to shut the door against the industry of any part of the inhabitants of this great empire." They asked either that Bengal fabrics might come into England free, or that English fabrics might pay the same duty on entering India as Indian fabrics paid to enter England.

The government denied the request. So completely were the cotton manufacturers of India crushed, that certain cultivators, who had paid 78 per cent. of their product to the government as a ground-rent, made manure of the remainder for want of a market. Though the population of India is more than three times greater than that of the United States, Dr. Carey estimated twenty-five years ago that all its proprietary rights of every kind in the land of India would sell for hardly more than those of the State of New Jersey.*

185. Taxation by Profits of Enforced Trade—Turkey.—The motto of England might well be, "Let me make the tariffs of a country, and I care not who wears its crown." A country can be subjugated by treaty, more cheaply than by armies, if it will only make a satisfactory treaty. In 1675 Turkey bound herself to Great Britain, to charge only 3 per cent. duties on imports, 16 cents per ship anchorage, and no internal tax whatever to any resident alien. The Turks are said to have been seduced into this treaty by the notion that, their government being established to convert the world to Moslemism, it was an impiety to permit Christians to contribute to its revenues. Certainly, the Christians were very willing to profit by this kind of scorn. No duty paid by foreigners, therefore, has ever exceeded 7.6 per cent. in all the Ottoman Empire. The native farmers and grazers pay as high as 62 per cent. of their profits, a special tax on sheep, olive-trees, fig-trees, tithes of all other products, and finally a tax on exports. But even foreigners residing in the country, are not permitted to pay a tax, even for paving or lighting their own

* Dr. Carey says ("Social Science," by McKean): "The gross land revenue obtained from a country that is, naturally, one of the richest of the world, and with an area of 300,000,000 acres, is $72,000,000. In no case does the land subject to taxation seem to be worth more than four years' purchase; while over a large portion of the country it appears to be wholly destitute of exchangeable value. There being, however, some lands tax free, it is possible that the whole may be worth, on an average, four years' purchase, giving $288,000,000 as the money value of all the rights in land acquired by the people of India in the thousands of years it has been under cultivation. The few people of the little and sandy State of New Jersey, with its area of 6,900 square miles, have acquired rights in the land valued at $150,000,000; while the little island on which stands the city of New York, would sell for almost twice as much as all the proprietary rights to land in India, with its hundreds of millions of acres, and its 150,000,000 of inhabitants!

streets.* Prior to the treaty of 1675, Turkey represented, without decline or decay, the skilled industries and numerous populations, inherited through generations, from the Byzantine and Eastern Roman Empires, invigorated rather than enervated by the new blood of the barbarian Turks. "Her soldiers," says Freeman, "excelled those of any European nation." The names which still cling to many fine products of art, such as Ottomans, Damasks,† "Turkish" velvets and carpets, rugs, robes, and chairs, Morocco (then tributary to Turkey), Turkey leather, Damascus steel, Turkey red, Afghans, Cashmeres, Astrakhan, Smyrna goods of various kinds, Tyrian dyes, attar of roses, Arabian horses, all indicate the high superiority which Turkish industry then maintained in the useful arts. England, with her paltry 2,000,000 of people, was hardly more feared, as a rival to Turkey, than Uruguay would now be feared by England. The proud Sultan of the Ottomans deemed it scarcely worthy of his notice, that the obscure island of the north was charging Turkish iron and steel with duties of from $25 to $150 per ton, in the hope of one day developing its own manufactures. After 1700 it prohibited the importation from Turkey or elsewhere of calicoes, chintzes, and muslins. Until 1842 it prohibited the exportation to Turkey, or elsewhere, of machinery for working flax. In 1720, to compel its people to patronize the dear woolens and linens of England, instead of the cheap calicoes of Turkey and India, England fined every person found wearing a printed calico five pounds, and the seller twenty pounds.

While this unreciprocal condition of the duties did not materially affect Turkey, so long as Turkey and England continued to use like processes and machinery, it immediately exerted an effect upon Turkey, more disastrous than war could have done, when England (from 1767 to 1846) strode upward on her career of

---

* "Modern Turkey," 1872, by Farley, says: "In no other country in the world, having equal rank as a state, ... do foreigners hold such a privileged position as in Turkey. For example, they are exempt from all imposts whatsoever, either state or municipal, customs dues alone excepted; they may lead a life of pleasure or of business; may settle and amass wealth; or may travel and spend it; and at all times may claim the fullest protection which the laws of the empire are capable of affording, without contributing one piastre to the expenses of the state, and without being amenable in the smallest degree to Ottoman jurisdiction. If the Porte construct a road, light a town with gas, or pave or cleanse the streets, it can not compel the foreign residents to contribute a para towards the cost, while the whole system of taxation is rendered irregular and difficult in consequence of the mischievous obstructions offered by these characters in nearly every relation between the foreign population and the government."

† From the place of manufacture, Damascus.

invention, substituting coal and steam for human muscle, while forbidding the export of either her machinery or artisans to Turkey. Immediately Turkey became "the sick man of Europe," because the only power, in Europe, that ever admitted all foreign goods free.

The Oriental and Levant Trading Company rivalled the East India Company in the magnificence of its profits, and the exhausting suction it was able to practice upon a country still nominally under its own flag. The ruin of Turkey by foreign trade was more complete, as respects its commerce and industries, than the ruin of Poland by partition, or than the prostration of Rome by barbarian subjugation. Liverpool, London, and Birmingham grew by the fabrication of wares, not merely of a kind which had previously been made for other markets in Turkey, but at prices which excluded Turkish products from their own home markets.*

From the commercial creditor, England has gradually become the mortgagee of Turkish revenues and provinces. Egypt is in pawn. The Suez is an English highway. The Eastern question

* In *London Academy* of Nov. 25, 1876, an English writer says: "Throughout beautiful lands, once the garden of the world, the human species is becoming extinct. Works of irrigation, the masterpieces of by-gone dynasties, are indistinguishable ruins. The Great Desert of Arabia, encroaching on the once fertile Syrian champaign, has crept onwards year by year, overlapping and overlapping, till the sandy ocean has joined hands with the Mediterranean. Around Aleppo alone, in the space of twenty years, a hundred villages have disappeared. From Smyrna to Ephesus the traveler may ride through fifty miles of the most fertile soil, blessed by the finest climate under the sun, without seeing an inhabitant or a cultivated field. Vast and fruitful tracts of country in Turkish Armenia, the Troad—nay, the very environs of the Bosphorus—tilled only twenty or thirty years ago with all the care of garden husbandry, are to-day a howling wilderness, scattered here and there with graves and ruins. On the borders of Armenia rises still, with lofty walls and large storehouses, a city, peopled, it is said, within the memory of man, with 60,000 souls; but it is a city of the dead. 'The finest country in the world,' says Sir George Bowen, 'has been more wasted by peace than other lands have been wasted by war.'"

Farley in "Modern Turkey," p. 194 (1872), says: "The manufactures in steel, for which Damascus was so famous, no longer exist; the muslin-looms of Scutari and Tirnova, which in 1812 numbered 2,000, are now reduced to less than 200; the silk looms of Salonica, numbering from 25 to 28 in 1847, have now fallen to 18; while Broussa and Diarbekhr, which were so renowned for their velvets, satins, and silk stuffs, do not produce a tenth part of what they yielded thirty years ago. Bagdad was once the center of flourishing trades, especially of calico-printing, tanning, and preparing leather, pottery, jewelry, etc. Aleppo was still more famous, for its manufactures of gold thread, of cotton tissues, cotton and silk, silk and gold, and pure cotton called nankeens, gave occupation to more than forty thousand looms, of which at present there remain only about five thousand. Various causes have contributed to this decrease of manufacturing industry; and now Sheffield steel supplies the place of that of Damascus; cloths and every variety of cottons have supplanted silk; English muslins are preferred even to those of India, and the shawls of Persia and Cashmere have given way to those of Glasgow and Manchester."

is fast becoming one, of the degree of security obtainable by England for the Indian Empire, in consideration of permitting Constantinople to become a Russian capital.

186. Taxation by Profits of Enforced Trade—Ireland.—From 1698 to this day, Great Britain has been one nation and Ireland another, as respects taxation. Never in a single instance has a British Parliament, or influence of any kind, aimed to legislate or administer in a manner to foster Irish interests, or to place them on an equality with English. Every act of British taxation has treated Ireland as an alien country, whose interests were to be subordinated to Englishmen's profits, so far as Englishmen themselves could see clearly where their own profits lay. This summing up of three centuries of history is the cause, both of the chronic disloyalty of Ireland, and the conviction, so generally felt by intelligent men of other nations, that England, not having the moral sagacity to rule Ireland fairly, lacks the moral right to rule Ireland at all. Englishmen usually charge the expression of this conviction, by native Americans, to the desire to "cater to the Irish vote." In this way only can Englishmen hear Great Britain's moral vacuity, in governing Ireland, suitably denounced, without blushing. This charge, however, is as morally wide of the truth as England's misgovernment in Ireland has been wide of ethical decency. Americans, by their Federal Union, become instinctively educated to the principle of equity among states, and fairness on the part of large states toward small, as distinguished from the English notion of absorbing and sacrificing inferior states to the one dominant state. An American, therefore, no sooner learns the facts which show that Irish interests have invariably been sacrificed to English, than he feels their injustice, with all the force of an ethical training in equal politics, which Englishmen do not possess, and can not borrow.

In 1698, William III., Prince of Orange, on hearing a deputation of woolen manufacturers of England complain of the increase of woolen manufacturing in Ireland, as something prejudicial to the interests of English manufacturers, had he possessed the modern American sense of right and equity among states, would have answered, "Sirs, it is no part of my business to prevent Irish manufacturers from outstripping English. You are both subjects of a common realm and entitled equally to the care of government." Instead he promised to "do all that in him lay to discourage the woolen trade of Ireland."

In 1698, a majority in the Irish Parliament, which Mr. Gardner,

chairman of the Ways and Means Committee of the same body in 1782–3, denounced as "corrupt," was induced to lay an export duty on cloths sent to England, instead of an import duty on cloths brought from England, the effect of which was to deprive Irish manufacturers of the English market. At this time the French, by raising their protective duties against England, were getting that foothold which soon enabled them to undersell England in woolen cloths in all the markets of Europe.

On measures introduced in 1783 by Mr. Gardner, the Irish Parliament adopted a definitely protective policy, which England suffered her to do without open resistance, owing to her own humiliation in the loss of America. So prosperous was Ireland for a brief period that her Parliament appropriated £50,000 to assist Swiss immigrants, principally artisans, in locating in Waterford. Her population increased by 3,000,000 in twenty years.* In 1799, when the act of union with England was first proposed in the Irish Parliament and defeated, the House of Commons, in its address to the King, stated soundly and cogently the reasons for defeating it.†

The late premier has recently given the seal of his emphatic approval to the statement that the means by which England cozened and bought the passage of the Act of Union through the Irish Parliament were intensely corrupt. Gladstone thus gives his sanction to the specifications of corruption embodied in Plowden's and other narratives of this transaction. Un-

* Lord Clare, speaking about the condition of Ireland at this period, says: "There is not a civilized nation on the face of the habitable globe which had advanced in cultivation, in agriculture, in manufacture, with the same rapidity in the same period as Ireland."

Lord Plunkett, describing Ireland at the same time, says: "Laws well arranged and administered, a constitution fully recognized and established, her revenues, her trade, her manufactures, thriving beyond the hope or example of any other country of her extent."

† The address said: "Giving the name of Union to the measure is a delusion. . . . In manufactures any attempt it makes to offer any benefit which we do not now enjoy is vain and delusive, and wherever it is to have effect, that effect will be our injury. Most of the duties on imports which operate as protection to our manufactures, are under its provisions to be either removed or reduced immediately, and those which will be reduced are to cease entirely at a limited time, though many of our manufactures owe their existence to the protection of these duties, and though it is not in the power of human wisdom to foresee any precise time when they may be able to thrive without them. Your Majesty's faithful commons feel more than ordinary interest in laying this fact before you, because they have under your approbation raised up and nursed many of these manufactures, and by so doing have encouraged much capital to be invested in them, the proprietors of which are now to be left unprotected, and to be deprived of the Parliament, on whose faith they embarked themselves, their families and properties, in the undertaking." Plowden's *Review*, vol. v. Appendix, page 34.

questionably, Gladstone would not have sanctioned the charge without knowing, not only that it was true, but that it would not be in the power of any Englishman to deny it. Moreover, no Englishman of note has denied it, and it therefore stands virtually admitted by the whole English nation.*

The Act of Union was designed to promote Englishmen's profits by transferring numerous branches of industry from Ireland to England. This was effected by removing all duties, or nearly all, from English goods shipped into Ireland, while leaving considerable duties on those shipped from Ireland into England. The doctrine that the "consumer always pays the duty," and hence that Englishmen would only be taxing, instead of benefiting, themselves, was forgotten. The practice of English legislators, in passing the Act of Union, contradicts the English economists, almost without exception. The following schedule of rates of duties, from Plowden's *Review*, shows how England kindly gave free goods to Ireland and labored on under the burden of tariff taxes on all goods purchased by her own people from Ireland :

Irish Goods shipped into England.	£	s	d	English Goods shipped into Ireland.	£	s	d
Beer	0	8	0	Beer	0	4	6
Bricks, tiles, etc	5	12	10	Bricks, tiles, etc		free	
Candles ... lb	0	8	1	Candles ... per lb		free	
Cordage ... ton	4	10	3	Cordage ... ton		free	
Cider ... hhd	0	19	2	Cider ... hhd		free	
Glass ... sq. foot	0	2	2½	Glass ... sq. foot		free	
" flint or enameled ... per cwt	2	3	6	" flint or enameled ... per cwt		free	
Leather ... lb	1½d	to	4s	Leather ... per lb	1d	to 2s	6d
Paper, glazed ... per cwt	0	6	0	Paper, glazed ... per cwt	0	0	5
Silk ribbon ... per lb	0	5	0	Silk ribbon ... per lb	0	2	1
Gold mixed ribbon ... "	0	6	8	Gold mixed ribbons ... "	0	2	9
Silk stockings, gloves, etc "	0	3	0	Silk stockings, gloves, etc "	0	1	3
Miscellaneous silk, silk ware, ... per lb	0	4	0	Miscellaneous silk, silk ware ... per lb	0	1	8
Soap ... "	0	0	2½	Soap ...		free	
Spirits ... per gal	0	5	1½	Spirits ... per gal	0	3	7
Starch ... per lb	0	0	5½	Starch ... per lb		free	
Confectionery ... "	2	2	0	Confectionery ... "	0	10	0
Tobacco ... "	0	1	7	Tobacco ... "	0	1	½
Snuff ... "	0	1	10½	Snuff ... "	0	0	10½

* The charge is thus set forth in Battersley's "Repealer's Manual": "The amount of salaries given to those who held places during the King's pleasure, and whose votes mainly contrived to carry the Union, is set down at £68,877; in addition there were twenty-six lawyers who received places ; two hundred borough mongers, who received for their votes £1,500,000. *New Titles*—61 were given for marquises, 6 earls, 13 viscounts, 3 viscountesses, 23 barons, 12 baronets. . . . The price of a single vote was familiarly known—it was £8,000, or a civil or military appointment to the value of £2,000 per annum. They were considered by the government party simple, who only took one of three. The dexterous always managed to get at least two of three, and it would not be difficult to mention the names of twelve or twenty members who contrived to obtain the entire three—the £8,000, the civil appointment, and the military appointment."

The decline in the manufacturing industries of Ireland, in the thirty years following the repeal, and even prior to the breaking out of the potato rot, and the Irish famine of 1846–9, reduces the problem of the unfitness of any one race of men to rule another, to the definiteness of a demonstration in mathematics. The thirty years, preceding 1800, were years of as great prosperity in Ireland as in England, and of a growth in population which, if continued to the present, would have given Ireland to-day 20,000,000 people. It is difficult to estimate the amount of profit, made by English manufacturers and merchants, out of the subversion of Irish industries.* They sold increasingly, in Ireland, the goods of every kind which Irish artisans had been making previous to the Act of Union. Temporarily, therefore, in all these thirty years the Union must have brought to English mills exactly the grist they sought.

Up to 1846 the Irish people, who were so largely driven out of manufactures, continued to have some protection on their agriculture in the form of a duty on the importation of corn. In

---

* The following tables show the subversion of Irish industries:

	NUMBER OF MEN EMPLOYED BEFORE THE UNION.		AFTER.
1800 Limerick, one branch of trade	15,000	1831	None
" Cork, glove makers, " "	3,000	"	500
" " shoe makers, " "	300	"	100
" Youghal, 7 large tanneries		"	None
" " wool combers	200	"	12
" Dublin, all trades	30,000	"	10,000
" " prosperous weavers	5,000	"	100
" " stocking making	600	"	None
" Drogheda, stocking making	2,000	"	600
" Dublin, liberty's weavers	4,000	"	100
" Kilkenny, 1 parish, St. Canice	4,000	"	98
" Carrack, one branch of trade	5,000	"	40
" in all Ireland, working at cotton	30,000	"	500
" " " " " linen yarn	20,000	"	3,000
" Dublin, silk weavers	15,000	"	441
Dublin, 1800, master woolen manufacturers	91	1840	12
" " hands employed	4,918	"	602
" " master wool combers	30	"	5
" " hands employed	230	"	66
" " carpet manufacturers	13	1841	1
" " hands employed	720	"	None
Kilkenny, 1800, blanket manufacturers	56	1822	42
" " hands employed	3,000	"	925
Balbriggan, 1799, calico looms at work	2,500	1841	226
Wicklow, 1800, hand looms at work	1,000	"	None
Cork, " braid weavers	1,000	1834	40
" " worsted weavers	2,000	"	90
" " hosiers	300	"	28
" " cotton weavers	2,000	"	220
" " wool combers	700	"	110
" " linen check weavers	600	"	None
" " cotton spinners, bleachers, calico printers by thousands		"	None

The importation of raw silk for manufacture shrank from 144,275 pounds to 3,190 pounds in 1831. Shoes exported to America declined from a value of $70,000 to noth-

that year the duties on corn were repealed. There had been a "blight" in 1831, caused by that continual cropping of land to one or two crops without rotation, which is the necessary mode of tilling the soil where no sufficient or near markets exist. The potato rot of 1846 would never have occurred, if the modes of agriculture had continued to be what they were before the Act of Union. In the year of the repeal of the corn laws, therefore, the great famine descended upon Ireland, for causes as inseparably resultant from the economic policy of England as were the similar famines in India. The result goes far toward proving that those large aggregations of men, which we call nations, have not yet advanced to the possession of a conscience, or an economic intelligence. The taxation of one nation by another, in the form of profits on its enforced trade, in the degree that barely enriches the taxing nation, but plunges the taxed nation into famine, while it is really a form of persecution more painful than rack, stake, or thumbscrew, more unprincipled than the Inquisition and more desolating than the crusades, still receives the polite genuflexions of thousands, and is called free trade.

---

ing. The export of fish, soap, candles, disappeared. Shipping employed in carrying Irish commerce shrank to one-fifth its previous tonnage. Forty vessels had once carried Irish goods to Newfoundland. None were any longer required. The consumption of tea by the Irish people shrank to one-twentieth in 1821 what it had been in 1786. Before the Union, 200,000 people were employed in factories. In 1850 only 24,725. —["Why Ireland is Poor," by John F. Scanlon.

CHAPTER XIII.

TAXATION CONTINUED.

187. France—Conditions.—The practice of France, in raising revenue, is as little studied in the United States, as that of Germany, or Russia. Yet the conditions, of each of these countries are more nearly like those of America, than are those of England, whose precepts, if not whose practice, Americans give more attention to, than to those of any country outside their own. According to the French census of 1872, a slightly greater proportion of the people of France are maintained by agriculture, than of the United States, according to its census of 1880. In France, out of a total population of 35,121,992, no less than 18,513,325, or 52.71 per cent., were tillers of the soil, or members of their families. The number in mines and manufactures (classed as industrial) were 8,451,344, being 24.06 per cent., 8.43 per cent. of the people being in commerce, 2.51 per cent. in transport, credit banking, and commission, 0.62 per cent were clergy of all religions, 5.99 per cent. were annuitants, 1.56 per cent. were in the armed force, and 1.56 per cent. in the administration of the government.* It is remarkable, in contrast with England, that the number of those doing business on their own account, as proprietors and managers, are 6,674,248, while the total of those acting under direction of others in production, as directing overseers, workmen (ouvriers), and day-laborers, amount to only 6,151,726. The families, including the domestic servants, of those who are their own *entrepreneurs*, or employers, in the work of production, number 21,604,526, or about two-thirds in a total of 34,356,081.

Every alternate man, in France, is his own employer. In Great

* "Condition of Nations," by Kolb.

Britain about seven-eighths of the people are wage-workers. The land is officially parcelled into (in 1842) 126,210,194 parcels, which are held by 11,053,702 proprietors, with the allowance that one person is counted as many times as a proprietor as he owns land in different districts of taxation. Out of 5,970,171 men and women engaged in agriculture, 2,689,302 cultivate their own land. Women form more than a fourth of the working force in agriculture, a third in mining and manufacturing industries, a fourth in commerce, a third in miscellaneous occupations, and six-sevenths of those in religious orders, as monks and nuns.* The nuns largely outnumber the entire male clergy, both secular and recluse. About 2,000,000 of the people live by the cultivation of the vine, directly, apart from those engaged in the manufacture of wine, the annual product of which is 50 gallons per capita for the whole population of France,† worth about £1 19*s.* 8*d.* per gallon. The manufacturing industries employ directly 1,782,932 persons, and the value of their product is £390,240,000. They must directly support, therefore, about 5,000,000 persons. The total value of the foreign trade of the country is about the same as that of the United States.‡

In 1886, one-third the population could neither read nor write, 11½ per cent. could only read, and 56 per cent. could both read and write. In 1855, the total amount expended by the state, the departments, communes and individuals upon school and education was £1,300,000 (of which only £240,000 was expended by the state), against £18,520,000 expended for land and sea forces, and £22,400,000 for the national debt. Only one-third of the population live in towns of more than 2,000 inhabitants. Two-thirds are officially described as living in "flat country." There is almost no emigration from the country (less than 20,000 persons a year), and the increase of population is very slight. The government is highly centralized. Whether its form be imperial, kingly, or republican, the central power at Paris maintains a close grip on the appointment of mayors of cities, prefects of police, and other executive officers throughout the country, and reserves to itself the collection of all revenues and the control of all police. In the sense in which the phrase "local government" may be used in America, England, or even Russia, there is very little local government in France.

---

* Males, 13.102. Females, 84.300.

† In 1875, it was 1,720,527,842 gals.

‡ In 1878 { Imports, £203,556,000 / Exports, £164,472,000 } Foreign trade, £368, 028,000.

188. France—Revenues.—In 1878, the French budget of revenue foots up as follows :

Direct Taxes :		
On land, poll, and movement tax, door and window, tax on industries, etc.		£ 15,684,560
Special Taxes :		
On horses and carriages, lands in mortmain, mines, billiards, weights, exclusive societies, and apothecaries' examinations		1,024,651
Registration, stamps, Crown lands, sale of movables and property without heirs		25,518,400
From forests		1,522,904
General customs duties, including those on sugar and salt		10,723,000
Indirect Taxes :		
Proceeds of tobacco monopoly	£12,859,000	
" gunpowder	547,040	
Duty on drinks	15,967,000	
" home sugar	4,910,360	
With duties on salt, matches, chicory, paper, oil, soap, candles, vinegar, railway passengers, other passengers, dynamite factories, in all amount to a total for indirect taxes of		42,265,130
Postal revenue		4,555,040
Sundries		4,915,941
Other sundries		634,579
Extraordinary sources		2,920,227
Total revenue		£109,865,132

Such an exhibit does not show clearly how much of this revenue is collected on imports, but the amount is currently stated at from $65,000,000 to $75,000,000. Wool of all kinds is free of duty, since 1881, as against a duty of 25fr. per quintal, previously existing. As France has about 25,000,000 sheep, this is a withdrawal of protection from the wool-grower. Sawed marble is free, but sculptured marble pays protective duties. Every form of iron pays duties on its importation, proportionate to the amount of labor invested in it, except iron dross and slag. About fifty kinds of chemicals, thirteen kinds of colors, and ten kinds of dyes, including Prussian blue, pay protective duties. Starch, wax, feathers, glass in plates, yarns, threads, warps and tissues of flax, hemp, jute, cotton, wool, and silk, paper of all kinds, pasteboard, dressed skins, belting, morocco, watch and clock movements and materials, nails, planks, boards, tackle, apparel, and furniture of ships, buttons, cattle, sheep, hogs, game, poultry, turtles, fresh and salted meats, butter, honey, whale oil, and sperm, petroleum oil, (much heavier on the refined than on the crude), lemons, almonds, camphor, dyes derived from coal tar, and numerous other raw materials and finished products, all pay duties, and those duties necessarily work protection to the French producer, wherever the article is produced in France, and the imported article competes with the domestic.

For the year 1883 the product of state taxes was $608,603,151.* The direct taxes, viz., taxes on public lands, forests, real estate, houses, apartments, billiards, etc., produced $146,290,951. Of indirect taxes the registration tax, being a tax on the formation of new companies, and the transfer of houses and landed property by purchase, is the most productive. The other indirect taxes are stamps, which are virtually taxes on trading and exchange, and excise, which are taxes on consumption. The entire indirect taxes for France and Algeria yielded $453,006,705. The customs duties yielded $71,301,920 for France, and $1,505,593 for Algeria. The customs duties in France, therefore, form only about one-eighth of the whole revenue, which seems a much smaller proportion than in Great Britain or the United States. Possibly this difference may be owing, however, to the fact that in the latter countries there is a large local revenue not counted as national, which in France, owing to its more centralized system, is included in the national revenue. The articles which are imported free are raw and waste silk, cotton, wool, flax, hemp, jute, skins, lard and tallow, undressed fur, skins, guano, oil fruits and oil seeds, sowing seeds, exotic gums, timber, staves, wood, saffron, indigo, copper, lead, pewter, and zinc—in all of the value of $383,427,521. These articles are almost wholly obtained by import, and there is almost no production of them for export.

The articles whose importation is chiefly charged with protective duties are manufactures of cotton, flax, hemp, jute and silk, yarns and tissues, cattle, horses, mules, cheese, colonial products, including foreign sugar, coffee, cocoa, tea, pepper, etc., refined and raw French sugar, coal and coke, perfumery, wines, brandy and spirits, mirrors and bottles, paper and pasteboard, dressed skins, manufactures of leather, jewelry, manufactures of metals, fancy goods, manufactures of wood, wearing apparel, and other articles.

Of most of these the export is much larger than the import. Of manufactures of leather the export is twenty times greater than the import; jewelry, nine times; metals, three times; fancy goods, ten times; wearing apparel, twelve times; brandy, six times; manufactures of cotton, flax, hemp, jute, and silk three times, and perfumery sixteen times. But of cattle the import is eight times greater than the export.

---

* United States Consular Reports, No. 51, March 1885, p. 519.

The French divide their foreign trade as follows (in millions of dollars) :

	Imports.	Exports.		
1. Alimentary substances.....	$378	221	Total of Imports,	$1,150
2. Articles essential to industry..	502	200	" Exports,	919
3. Manufactures.....	269	497		
			Total Foreign Trade,	$2,069

189. France, as Discussed by Smith.—Adam Smith* discusses a class of retaliating duties levied by England and France, each on importations from the other only, at a different rate from the duties levied by the same countries on the like goods coming from Spain, Portugal, or Germany. He seems to discuss these as if they were illustrations of the principle of protection. The desire to injure another nation, however, is a wholly unlike motive to the wish to benefit home industries.

It must not be supposed that such duties bear any resemblance in principle to modern protective duties. We are not aware that they have had any existence in the legislation of the present century. Excessive duties laid by England on French wines, while admitting similar wines free, or at low rates of duty, from Portugal or Germany, when England was not seeking to cultivate wines, and had no interest in their cultivation in France or Germany, would draw as indignant comment from any modern protectionist, as from any free trader. Duties levied from motives of malice toward a particular country, and from which other countries

* "Wealth of Nations, book iv., ch. iii. p. 208," says: "To lay extraordinary restraints upon the importation of goods of almost all kinds, from those particular countries with which the balance of trade is supposed to be disadvantageous, is the second expedient by which the commercial system proposes to increase the quantity of gold and silver. Thus in Great Britain, Silesia lawns may be imported for home consumption, upon paying certain duties; but French cambrics and lawns are prohibited to be imported, except into the port of London, there to be warehoused for exportation. Higher duties are imposed upon the wines of France than upon those of Portugal, or indeed of any other country. By what is called the impost of 1692, a duty of five-and twenty per cent., of the rate or value, was laid upon all French goods, while the goods of other nations were, the greater part of them, subjected to much lighter duties, seldom exceeding five per cent. The wine, brandy, salt, and vinegar of France were indeed excepted; these commodities being subjected to other heavy duties, either by other laws, or by particular clauses of the same law. In 1696, a second duty of twenty-five per cent., the first not having been thought a sufficient discouragement, was imposed upon all French goods, except brandy; together with a new duty of five-and-twenty pounds upon the tun of French wine, and another of fifteen pounds upon the tun of French vinegar.

"The French in their turn have, I believe, treated our goods and manufactures just as hardly; though I am not so well acquainted with the particular hardships which they have imposed upon them. Those mutual restraints have put an end to almost all fair commerce between the two nations, and smugglers are now the principal importers, either of British goods into France, or of French goods into Great Britain."

are exempted, and levied on commodities in whose production the country imposing them has not, nor seeks to have, any interest, are not laid from an economic, nor even from a selfish, motive, but from the blind fatuity of passionate hatred.

Dr. Smith, however, dates the protective policy in France from Colbert, who, in 1667, "imposed very high duties * upon a great number of foreign manufactures." Upon his refusing to moderate them in favor of the Dutch, they, in 1671, prohibited the importation of the wines, brandies, and manufactures of France. Smith attributes to Colbert also † a prohibition of the export of corn, in order to favor domestic manufacturers who needed cheap breadstuffs.

Dr. Smith's complaint against the different systems, both of customs duties and excise, prevailing in different parts of France,‡ was timely in its time, and doubtless had much to do with inducing the United States, in the subsequent adoption of their constitution, to guard against any similar restrictions upon the interstate trade of our various states. Dr. Smith boasted of the greater freedom of internal trade at that date in England, as compared with France, and with justice. It does not abate, however, the ground of complaint heretofore made against Great Britain, that in her tariff system, she never recognized Ireland, as having like title with England, to the benefits of protective legislation. The restrictions on the internal trade of France, against which Dr. Smith complained, disappeared in the French Revolution in 1789.

Dr. Smith acknowledges the great patriotism, abilities, and genius for detail, of both Colbert and Turgot, who founded the protectionist system in France. He says the most intelligent men in France think they were mistaken. Dr. Smith should not have dodged behind "the most intelligent men in France," to state his own opinion, for three reasons: 1. There are no means of determining who are the most intelligent men in France; 2. When they are discovered, there is no means of determining whether they think Colbert and Turgot were mistaken; 3. If it were determined that they thought so, it is still evident that they might be mistaken, since to affirm that Colbert and Turgot were themselves mistaken, they being confessedly two of the most intelligent men in France in their day, is to affirm that the very authority to

* "Wealth of Nations," p. 206. † "Wealth of Nations," McCulloch's ed., p. 299.
‡ "Wealth of Nations," p. 408.

which Dr. Smith appeals, viz., the most intelligent men in France, might err.

Dr. Smith, moreover, does not analyze impartially, or at all, the actual protective measures adopted first by Colbert and afterward by Turgot, in the century following 1667, nor compare them with their effects. The system of duties then levied aimed to draw into France the manufacture of porcelains, glass, earthenware, and china, silks, satins, velvets, and plushes, fine woolens, iron and steel, wooden ware, soaps, candles, oils, cosmetics, perfumes, watches and jewelry, leather, boots, shoes, gloves, and the like. Did the measures succeed? is the simple question of history, to which Adam Smith, with the ample learning at his command, and with his experience as a traveler through France, in the capacity of intellectual *valet de chambre* to a nobleman's son, should have addressed himself. He certainly knew whether these manufactures had grown or declined, under the influence of these "masters of detail," whom the "most intelligent men in France" thought to be mistaken. But Dr. Smith neither names these "most intelligent men in France," nor adduces the data to show that manufactures in France did not grow, in spite of the untoward effect of religious persecutions against the Protestants, driving out by thousands the very artisans whom Colbert and Turgot were trying to invite into the country by the protective system.

On the contrary, Dr. Smith mixes up his discussion of the protective system, as adopted in France, with statements of the merely spiteful systems of retaliation against France only, adopted by England and Holland, as if the two notions of trying to injure another nation's trade, and to build up a nation's own internal trade, were identical. He discusses, in the same connection, the interior revenues collected on goods passing from one French province to another, as if these were protective duties, when he must have known that they were what Colbert and Turgot labored to remove, as the chief obstacles to a protective policy.

In the same connection he derides the French owners of vineyards, in 1731, for inducing the government to order that no more vineyards should be planted, and that vineyards which had been idle two years should only be planted by special leave of the king, on showing that the land was good for no other use. Perhaps some analogy might be found between even this order and the action of the British government, in limiting the circulation

of bank notes to the volume of notes existing at a given date. But, whether so or not, it has no bearing on the question whether the systems of protective duties, inaugurated in France by Colbert and Turgot, aided largely in giving France her national prestige in Europe, in uniting her people, and in preventing their dispersion by immigration, in the manner that characterizes the populations of Great Britain.

French statesmen, from Napoleon to Guizot, Chevalier, Thiers, and Gambetta, have with great unanimity maintained the protective system. J. B. Say, Leon Say, and Bastiat among Frenchmen have written against it. Protection in France, therefore, has a record of experience. To it, France owes the introduction of her glass, porcelain, silks, raw silk, leather, including morocco, woolens, hosiery, jewelry, iron, and steel, sugar, and perhaps the maintenance even of her grape, wine, and cosmetic industries. To detail the rise of each of these would be to write a history of the protective policy in France, which would be a history of France itself. We confine ourselves to a single example, that of beet sugar.

190. Taxation as a Cause of Production—Beet Sugar.—Though the cane was grown in China, Japan, and India from the earliest times, honey was the only form of sweet known in Western Asia, Europe, or Northern Africa, until the conquests of the Saracens. Cane sugar only became a staple of commerce after the introduction of the cane into the West Indies. The fact that sugar could be abstracted from the beet was first made known by Margraff, a Prussian chemist, in 1747, and Achard, another Prussian chemist, first attempted, under the patronage of Frederick the Great, to enter upon the culture of the beet and manufacture of beet sugar at Caulsdorff, near Berlin. He published an account of his work in the *Annales de Chimie* (Paris), calculating that sugar could be produced at $5\frac{1}{2}$ cents per pound in 1799, and predicting that the industry would become profitable. The first two sugar-beet factories established near Paris, on the basis of Achard's statements, failed with heavy loss to the investors. The French Institute reported that beet sugar could only then be made at a cost of sixteen cents per pound. Such was the suspension of intercourse between France and the West Indies, and the general high prices, that sugar in Paris reached fifty cents per pound.* Napoleon appreciated the great importance of making

* Greeley's "Political Economy," p. 189.

the manufacture of sugar a success in France, and appeared to have a prescience of the magnitude it attained. He first encouraged chemists, agriculturists, and manufacturers personally to resume their work. In 1810 these efforts resulted in two loaves of excellent home-made sugar being presented to the emperor. He caused 80,000 acres of land to be set apart for the culture of beets, confided a considerable sum to the minister of agriculture to encourage the work, instructed the prefects of the several departments to cause similar experiments to be concurrently made in every department, established five schools of chemistry in aid of the manufacture, and provided four imperial factories, calculated to produce, from the crop of 1812, nearly 5,000,000 pounds of beet sugar. The overthrow of Napoleon converted the factory into the quarters of a pulk of Cossacks. From 1816 to 1837, the English never tired of pointing out to the French the magnitude of the loss they were sustaining, in paying two or three cents per pound more for their sugar than the English. Dr. Wayland once made up a calculation, based upon supposititious and hypothetical assumptions, which Mr. Greeley shows * to be very wide of the truth, in which he figured that the annual interest on the increased cost of their sugar to the French people would pay for all the sugar they would ever need to consume. The same formula has since been adopted by others, as a means of showing that the United States could more cheaply obtain all its iron and steel by importation than by manufacture. Dr. Wayland made up his case by assuming that the English price for sugar was $2\frac{1}{2}d.$ when it was $3\frac{7}{10}d.$, that England with half the number of inhabitants consumed two and a half times as much sugar as France, that France was consuming less by one-third than it would if it relied on importation for its supply, and was paying £1,400,000 per annum more for it, and that its beet sugar would not come down to the price of cane sugar in twenty years.†

* Greeley's "Political Economy," p. 193.

† Mr. Greeley's reply is a terse and vigorous argument, demolishing a pompous pretence. He said: "Dr. Wayland is all wrong in his facts. The actual average price of sugar *in bond* (that is, duty unpaid) in London in that year, 1837, was not 2½*d.* per pound, as he asserts, but £1 14*s.* 7*d.* per cwt., equal to 3 7-10*d.* per pound. Then, in regard to the consumption of sugar in France and England, I find that, in 1837, the quantity consumed in France was 249,058,832 pounds, and in England 442,838,720 pounds, which is not double—not 75 per cent. greater. The duty in France on sugar from her own colonies was 37*s.* 6*d.*; in England, the average duty was 24*s.* In reference to the price, the present Emperor of the French, writing in 1842 on the sugar question, said;

Mr. Greeley showed that, in 1865, France was making 678,287,-040 pounds of beet sugar, or more than five times the quantity which Dr. Wayland had estimated, thirty years earlier, would be required for the consumption of France. From the year 1837 onward, the beet culture and sugar manufacture became strong enough to bear a heavy excise tax. From 1840 to 1860 the protection afforded to home-grown sugar was only from one to three cents per pound. Since 1860 the home-grown beet sugar has borne rather more tax than the colonial. In 1875, the production of beet sugar in France reached 9,397,584 cwt., and paid in excise taxes to the government £4,698,680 revenue. This was the product of 508 factories. In Germany, Holland, Belgium, Austria, and Russia, the beet culture has also risen to formidable dimensions—Germany alone in 1878 exporting, chiefly to England, 2,363,000 cwt.

To-day, more than one-half the sugar sold in British and colonial markets, is beet sugar exported to these markets from Belgium, Germany, and France.* The British government has been besieged, both by its British sugar-refiners and its sugar-growers in Jamaica and the Mauritius, to do something to check the increasing cheapness of beet sugar, as it is rendering it absolutely impossible to grow cane, or refine sugar, at a profit. The Jamaica colonists have authoritatively expressed a desire for union, either with Canada or with the United States, and have indicated that unless cane sugar can be granted the boon of a protected market it must soon become extinct as an industry.

The fashionable style, among the English economists, is to com-

---

"'The price of sugar, which, under the Empire, was 9 francs per kilogramme, has since fallen to 1 franc 10 centimes; and though then protected and encouraged, it has now to support a tax of 27 francs per 100 kilogrammes; or, together, a difference, to the detriment of the manufacturers, of 817 francs, per 100 kilogrammes.'

"Deducting from 110 francs, the price of 100 kilogrammes of sugar at 1 franc 10 centimes per pound, the duty of 27 francs, leaves 83 francs as the price of the sugar exclusive of duty. According to Reed's 'History of Sugar,' the price of sugar in bond in London was then 36*s.* 11*d.* per cwt., or 86 francs 9 centimes per 100 kilogrammes. So that, only *five* years later than when Dr. Wayland wrote, beet sugar was cheaper in France than cane sugar in its cheapest European market!"

* In 1812 to 1816 one of the English doggerels or songs ran:

> "Says John Bull to Bony, While I use the cane
> You are welcome each year to get beat."

To this the modern reply might be:

> When Bony began on his cheap-sugar plan,
> With your cane you led us a dance,
> But my! what a go! to sweeten, you know,
> All your toddies with three lumps from France.

plain of what they are pleased to term the "bounties on the export" of French and German sugar. There is no such bounty either in France or Germany. All that either government intends to do, in favor of exported beet sugar, is to remit whatever internal taxes it has paid. This, it is believed, most governments do, in behalf of their exports. English economists and petitioners protest that rebate is paid on the export, in excess of what the sugar has paid the government, not indeed by legislative design, but by oversight. If the French government does more than repay the duty, it is probably done in the same way as in Germany, where the method of paying an alleged duty on the export is thus explained by our Consul-General Vogeler in 1885.* He says: "The government assumes that it requires eleven hundredweight of beets to produce one hundredweight of sugar. At this rate the tax is levied. But by improved methods and machinery, the manufacturer gets one hundredweight of sugar from nine hundredweight of beets, and being refunded at the rate mentioned above, he would get back $\frac{2}{11}$ more tax than he has paid. This premium being paid out of the general fund obtained by taxing the beets consumed, it follows that the greater the quantity of sugar exported, the less must be the revenue derived from the sugar-beet tax." Consul Vogeler says that sugar factories have sprung up all over Germany. They are built at a cost of $50,000 to $300,000. In the fall of 1881 there were 338; in 1884, 390; and he thinks the number in Germany now approaches 500. Up to the year 1843 the dividends paid by these factories had in many cases reached 40 per cent. per annum, and 15 to 25 per cent. was very common. The price of raw sugar had fallen from $6.84 per hundredweight in October, 1881, to $4.42 in October 1884. The price of beets has in consequence fallen, from about 28 to 30 cents per hundredweight, to 15 to 18 cents. The quantity of sugar beets produced in Germany in 1884 was 1,200,000 tons, and the export of sugar was 600,000 tons from Germany, France, and Belgium.

191. The Sophisms of Bastiat.—While the history, experience, and statesmanship of France have all vigorously argued for protection to domestic industry, as one of the first and most important functions of government, many persons in America, who have had no time to become familiar with either of these, have been amused, and in some cases misled, by the light, chirrupy, and frisky ingenuities of Bastiat, some of which almost rise to the

* U. S. Consular Reports, No. 51.

dignity of humor. "Of Bastiat's "Harmonies Economiques," the condensed truth is that, if Mr. Carey had not previously expressed the same ideas, there is no reason to suppose they would have occurred to Bastiat. His plagiarism stands conceded. The work, however, with which Americans are most familiar is his "Sophisms of Protection." The title "sophisms of protection" is a misnomer. Protection is an active, practical policy, which has been followed more completely by France, Great Britain, Germany, Russia, the United States, Italy, and Austria, and less perfectly by the minor nations, ever since taxation has come to be studied in connection with international commerce. It is not a speculation of the schools, does not rest on *a priori* reasoning, any more than military tactics or republicanism, and can not be overthrown by it. As it would be idle to talk of the sophisms of steam railways, or of rifled cannon, or iron-clads, or of army corps, or the electric battery, or the dykes of Holland, so it is idle to speak of the "sophisms" of a practice of all the leading governments of the world, which has been tested for centuries. Since no first-class government has ever entirely departed from it, it therefore may be a success or a failure, a cause of wealth or of poverty, of progress or decline, among nations, but it can not, by any process of thought, be made a mere "sophism" or mistake of reasoning. On the contrary, "free trade" has never in fact been reduced to practice by any nation, still less by any two nations. It has been used as a party cry to cover various forms and modes of intended protection to the industries of the country adopting it. It would be much more natural to look for sophisms in this speculative theory, so foreign from the practice of governments, and so much in favor with visionary dreamers who have never had aught to do with the practical work of legislating, either to obtain a revenue with the least possible injury to industry, or to satisfy a constituency, whether of producers or of consumers.

Bastiat begins by attributing to protectionists the sophism that the "scarcity" which is obtained by checking the importation of an article, as a means of promoting its domestic production, is better than the abundance of the article which would result from its unrestricted importation. This he generalizes into the supposed protectionist sophism that "scarcity is better than abundance," and by attributing to them this belief he is able to argue, with very plain sailing, the general proposition that abundance is better than scarcity.

Let us weigh this perversion in the light of the actual exigencies of government. A government must either tax its domestic productions, or its importations, or both. It has no other choice. If it taxes the domestic production it promotes scarcity by diminishing that production, just as clearly as if it taxes the foreign. The tendency of all taxation, to promote scarcity of the thing on which the tax is collected, is unavoidable, except in a few instances, and those occur solely among protective duties. The practical question is whether the tax shall be so laid as to cause scarcity of the domestic production and an increase of the importation, or a scarcity of the importation and increase of the domestic production. The free-trader puts the tax where it will stimulate the foreign production of the thing taxed ; the protectionist where it will stimulate the home production. For instance, as to iron : The free-trader would tax the tea, coffee, sugar, liquors, tobacco, clothing, and income of the domestic iron-worker, so as to raise his cost of living, and hence his wages. He would place stamp, license, transportation, and manifold other taxes on every process of industry incident to the manufacture of American iron, so as to increase, by 20 or 30 per cent., its cost of manufacture. Then he would admit foreign iron untaxed, in order to get it cheap. Of course the American manufacture, on which, owing to the bulk and weight of the article, we must largely depend for supply, would shut down, at least for a time. For it is natural that a very large source of supply, capable of turning out millions of tons a year, should be stopped by the presence of a very small actual surplus, say of a few tons, which are held low enough to place the large product at a loss. But the shutting-down of a large American source of supply, equal, say, to nine-tenths of our whole demand, would speedily produce a greater scarcity, and therefore dearness, than the free admission of a small foreign supply had produced, of abundance and cheapness. This would stimulate the foreign manufacture, and cause a rise in the foreign price, proportionate to the scarcity caused by the cessation in our domestic production. Of what avail, then, is Bastiat's "scarcity and abundance" theory ? His free trade promotes scarcity of domestic iron. Protection promotes scarcity of foreign iron. Free trade would prolong the "scarcity" of iron forever, because no country can ever have iron plenty, unless it produces it plentifully. Protection would render iron ultimately abundant and cheap, by causing its abundant production. Our product of iron, which, in 1840, had been a hundred years growing up to 347,000

tons, under the protective tariff of 1842, doubled up to 765,000 tons in 1846. Did this increased production make iron dear? Its average from 1842 to '46 was from $24 to$36 per ton, while in the ten years of preceding free trade it had ranged at from $35 to $52.50 per ton. The repeal of that tariff reduced the production to 564,755 tons in 1850, while the importation of rails rose from 15,161 tons in 1847 to 334,874 tons in 1853. Did our cessation in the production of iron and this flood of importation make it permanently cheaper? Not so. The price, which was $71 per ton in 1847, fell at first to $61 in 1849, and touched as low as $47 in 1851, and then, having utterly routed and destroyed the American producers, it rose to $77 in 1853, and to $81 in 1854, under the full influences of foreign free trade. For ten years the iron business, notwithstanding the frequent high prices, had a weary struggle for life, because of its liability to be dashed by the sudden fluctuations of the foreign markets—railroad bars fluctuating from $81 per ton in November, 1854, to $58.30 in June, 1855, then up to $67 in the summer of 1857, and down to $50 in 1858, and $36 during our stringency of the winter of 1861-2. In 1860, during these fluctuations, our product of pig-iron was only 804,000 gross tons, or, notwithstanding our great increase in population and in the need of iron, only 39,000 tons more than we were producing fourteen years before—our production during most of the intervening period being less than it was in '42-46. We have seen that, under free trade, prices were more fluctuating, but not, on the whole, as low as under protection, and that our production of iron was less. Did the importation continue to supply us abundantly? Not so. In the first five years of free trade the importations swelled from 15,161 tons to 334,874 tons a year (in 1851), but having by this time obtained the monopoly of our markets, the importers had been gradually raising the price on us until it stood at $78 all through 1853, and rose to $81 in 1854. This is the result of the boasted cheapness obtained by importation. At this high price domestic production again came to the relief of consumers, and the production of anthracite pig increased from 339,285 tons in 1854, to 441,110 tons in 1856, to 524,531 tons in 1860, and to 684,018 tons in 1864. Under the protective tariff enactments of 1862-64 and 1867 our product of pig metal, which had risen to only 607,000 gross tons in 1860, had risen to 1,865,000 tons in 1870, and to 4,500,000 tons in 1880, a clear increase in the first nine years of 1,130,000 tons, or 170 per cent. on the amount which the production had attained in the pre-

vious century of progress, and in the second decade of about 150 per cent. on the product of 1870. Facts and figures like these recur abundantly in the history of France. Her statesmen, from Colbert to Napoleon, and from Napoleon to Chevalier and Thiers, have seldom swerved from the policy of protection to French industry, or to that which they conceived to be its demands. The scarcity, which results in checking an importation, may develop a domestic production, whose result will be a greater permanent abundance, and cheapness, than importation could ever have caused. The temporary abundance and cheapness which result from an untaxed importation, coming into competition with a variously and heavily taxed domestic production, may, by paralyzing the production, create an ultimate scarcity and dearness greater than could ever be attained were the domestic production encouraged, and the price left solely to be determined by home competition. The protective policy makes scarcity, only as the sowing of the seed in spring makes scarcity, in order that at the harvest there may be a greater abundance. Indeed, in all the phenomena of production, the first employment of the capital involved creates scarcity, *i.e.*, lessens the capital available for consumption. The workingman imposes scarcity upon himself voluntarily, in order to save enough of his money, which he might expend for daily consumption, to form a capital with which to engage in business. The capitalist sees before him always two purposes to which he can devote his means—the first in procuring an abundance of all the means of enjoyment, the second in productive industry. Every employment of his capital for productive industry is a withdrawal of some portion of what he might expend for consumable comforts—in short, is a cause of relative scarcity, in the sense referred to by Bastiat. But the temporary scarcity of wheat occasioned by the necessity of sowing the seed for future harvests, the temporary scarcity of consumable capital, occasioned by efforts to increase the amount of capital employed in productive industry, and the temporary scarcity caused by checking the importation of an article, which a country has all the unemployed resources to produce with as great ease, and in as great abundance, as any other country, are all alike instances in which the temporary scarcity and dearness are the inseparable conditions precedent to permanent abundance and cheapness.

In his second chapter, Bastiat assumes that protectionists aim to increase the obstacles to production, under the false notion

that the obstacles to production are the cause ; that, for instance, as labor is the cause of production, protectionists think that mode of production the best which requires the most labor. No protectionist had any such notion. In this chapter he italicises the assertion that labor is never without employment. This is a bald economic untruth. There have been periods in Ireland, alone, when two millions of people offered to work sixteen hours in the day for bread, and could not get work there, nor could they get where work was to be had. Had the labor of Babylon and Nineveh never been without employment, would those cities have been given over to the waste deserts? Both labor and capital may fail of employment for long periods. The world's history nearly consists of the migrations of both to new fields of employment, and their adventures and sufferings by the way.

In his third chapter, Bastiat argues that progress consists in the increase in the proportion of the result to the effort, and charges protectionists with aiming to bring about that system of industry in which the effort is greatest and the results least. Let us see. Mr. Abram S. Hewitt, our commissioner on iron to the Paris Exposition in 1867, reported facts showing that one day's work in Pennsylvania, Wisconsin, or Missouri would make as much iron as two days' work in England or Belgium, or about two and a quarter in France. On Bastiat's basis, the proportion of the effort to the result, the men then engaged in making iron in England, Belgium, and France should have been induced to remove as fast as possible to the United States, because here the result in iron was from two to two and a half times greater for the effort in labor. The protectionist policy encouraged this transfer of iron production, and so increased the proportion of the result to the effort put forth, in accordance with Bastiat's desideratum. His error arises in supposing that the money price of labor is a measure of the effort put forth. It is only a measure of the competition between laborers. Blacksmiths put forth as much effort in one country as another, and attain about the same result, so far as the amount of work done is concerned. But in the United States, at the period referred to, they received $13.10 per week, in gold; in Great Britain, $6.33 ; in Prussia, from $2.52 to $4.32 ; in Saxony, from $2.52 to $3.60; and in Switzerland $5.40, according to an official report of our bureau of statistics at Washington. Iron puddlers received $16.54 per week in the United States, $8.75 in Great Britain, $3.60 to $4.32 in Prussia, $3.12 to $4.32 in Saxony, and $1.92 to $4.20 in Belgium. Now, if no greater effort were required

to make the same amount of iron in those countries than in our own, Great Britain could sell iron for half what we could make it for, Prussia and Saxony for one-fourth, and Belgium for one-fifth. But they did not. Removing all duties, they would, at first, have sold iron to us for one-fourth less, until they had stopped our manufacture, and then the magnitude of our demand would have compelled them to ask more, under free trade, than the previous price with duty added. But the fact that Prussians can only produce iron at three-fourths of the American price, when they pay one-fourth of the American wages, shows that their iron costs three times as much effort in days' work as ours, and hence that the world would be the gainer by 66 per cent., in the proportion of the result to the effort, if we should forbid the importation of a ton of Prussian iron, and compel German laborers, if they propose to make iron for our markets, to make it in this country. American protectionists generally would be satisfied if our tariff laws secured the production of those articles in this country which we can produce with a larger proportion of result to effort than the people of any other country.

M. Bastiat's third "Sophism of the Protectionists" is that they aim to equalize the facilities of all countries for production, and that it is from the differences between various countries in their facilities for production that trade arises, each country being able to export only that which it can produce more cheaply than any other country; consequently that the adoption of the protectionist policy would destroy trade.

We answer, that it is also from the same differences of facilities for production, as between different individuals, in any one country, that domestic trade arises, and that the international trade is always of far less importance than the domestic commerce of every country. Protection, by increasing the domestic production, increases the extent to which a people can exchange with each other at home, and diminishes the necessity only for going abroad. It lessens not the number of exchanges made, but only the distance to be traveled, and the transportation to be paid for, in making them. The ability of a people to make exchanges depends, ultimately, wholly on the amount of their production, which, in turn, depends primarily on their natural resources, secondly on their advancement in mechanical invention, and thirdly and through the two first, on the diversification of their industry.

There are 1,200,000 farmers in the Mississippi Valley, none of whom can make any exchanges with each other, because their

products are the same. There are a similar number of spinners and weavers in England who can make no exchanges with each other, because they are all producing the same thing. Bastiat thinks the continuance of this state of things increases the amount of commerce between these two classes of producers. We say it diminishes the amount of the commerce between the farmers and spinners to the lowest point; that if one-half the spinners were in the Mississippi Valley it would quadruple the value of the present products of that region and of its land, and also largely increase the value of the product of their spindles. Is there any doubt that in this respect we are looking at the aggregate of commerce, domestic as well as foreign, while Bastiat is looking only to the commerce that crosses the ocean, or some strait or channel of it? So long as the whole people of the Mississippi Valley are farmers, while their weavers and cutlers are in Lowell and Sheffield, is not the commerce of the people of Illinois with each other paralyzed by the fact that their industries are homogeneous? But if, of the people of Illinois, 3,000,000 were farmers, and 2,000,000 were mechanics and manufacturers, would not the exchanges of products then possible to them be infinitely greater than the exchange could be, so long as the two classes of industries are separated by thousands of miles? Commerce grows, not out of the unequal powers of various peoples to produce the same things, but out of their equal powers to produce different things. It is not inequality, but diversity of production, that promotes exchange. If a farmer in England raises sixty bushels of wheat to the acre, and another in France raises ten bushels, their inequality of production forms no inducement to them to trade with each other. But the farmer trades with the spinner, weaver, cutler, blacksmith, and carpenter, without regard to their equality or inequality of productive power. His trade is as profitable if they earn $5 a day and he earns $3, as if he earns $5 a day and they earn $3. Yet protectionists do not desire to create equality of production in competing branches, except as preferable to inferiority of production on our own part. They prefer equality to inferiority, superiority to equality, and supremacy to superiority. But they deny Bastiat's "sophism," that our inferiority to Englishmen in any branch of production helps us to trade with them. It must be our production of unlike products, not of unlike values, and as the soil and climate of Europe present no natural differences from those of the United States, a given population transferred from Europe to America

can produce here every product in kind which they can there, but at a more rapid rate and with less effort.

192. Modern Germany—Protective Taxation a Source of National Unity.—The power of Germany, which is now attracting the attention and admiration of the civilized world, has grown up in the brief space of sixty years, as the result of two intimately related policies, viz.: the general diffusion of literary and industrial education, and the protection of German manufactures, agriculture, and mining, against foreign competition, through the Zollverein. Americans have special reason to be proud of German progress, since the efficient agent in effecting the Zollverein was Frederick List, author of a work entitled "The National System of Political Economy," and who, though German by birth, became imbued with the principles of protection, during his residence in Pennsylvania. Prof. List was invited by Lafayette to accompany him in his tour of this country, and came only as a visitor and observer. He had previously edited an edition of J. B. Say's treatise on political economy, and his leanings were toward free trade. During his stay in this country he became familiar with its economical history, and reversed his opinions as to the effects of unrestricted foreign trade on domestic manufactures. He learned that our Federal Union grew out of an attempt to form a customs or commercial union, with free trade between the various states, and protection against foreign competition, as its guiding principle. He became familiar with the unitizing effects of such a union, and with the gratifying results to our manufactures and general industry, during the years from 1806 to 1815, in which commerce with England was interrupted or nearly destroyed, and the disastrous effects of the free trade treaty of 1816, which flooded American markets with English goods, swamped our manufactures, and in three years brought every branch of industry to the lowest stage of suffering and ruin. Thoroughly indoctrinated in the Pennsylvania school of political economy, of which Matthew Carey was then a leading expounder, Prof. List returned to Germany filled with the purpose of agitating for the adoption of the principle of protection to German industry, through a Zollverein, of which Prussia had, since 1818, been the proposer and exponent, while Hanover and other German states, largely influenced by England, had formed an opposing combination in favor of free trade. The dream of List was of a united Germany, bound together by a network of railroads centering in Berlin and Frankfort, collecting its whole

revenues in an exterior line of custom houses, under laws so framed as to secure the freest possible intercourse within the *bund*, and permanent protection to every needed industry against foreign encroachment. He had written a work expounding these views, while in America, and his ability, in advocating them in the public journals of Germany, caused him to be selected as the executive agent in negotiating such a union.

Prussia, since 1818, had been vainly endeavoring to draw the other German states into a Zollverein. In 1819, Saxe-Weimar and Mecklenburg had entered it, and in 1827 Wurtemburg and Bavaria made a treaty of commerce with it, but would not join it. Hanover, Saxony, and Hesse stoutly opposed it, and favored an anti-Prussian free trade coalition. Prior to this period the trade between Germany and Great Britain had consisted in the export of raw wool from Germany and the import of woolen cloths from England; an export of rags and an import of paper; an import of cotton goods and an export of food. Under these industries, Germany had been the granary of Europe, but her people so poor that throughout the eighteenth century, they were sold by their princes to foreign service as mercenary soldiers, and so weak, that in 1805 to 1815, it was but sport for France, which had pursued protective policies for two centuries, to march her armies through Germany, and make it the battle-ground of Europe.

In 1831, however, Hesse abandoned the free trade coalition and joined Prussia, the results of whose steady maintenance of the protective policy were beginning to impress the other German powers. Several of the smaller states followed in quick succession. In 1833, Bavaria, Wurtemburg, and Saxony, did the same. In December of that year, the union counted 14,800,000 people. In 1834 they had increased to 23,500,000. In 1835, Baden, Nassau, and Frankfort joined their number. In the next year the indefatigable List—through whose labors Germany was thus laying the foundation of its present prosperity—was ruined, pecuniarily, by the decline in the value of his extensive mining investment in Pennsylvania, in consequence of the adoption of a "free trade" tariff by the United States in 1833. This spur did not retard his labors. In 1839 the federation extended over 200,000 square miles and a population of 27,000,000 of people. In 1852 it had reached 33,600,000, and now it includes 40,000,000 of people, and from a mere customs union has welded the discordant principalities of the North German Confederation into the modern Empire of Germany. It is often claimed, by free traders, that the rates of the

Zollverein were, and that those of the present German empire are, low. They have been, and are indeed, lower than the rates of most other countries, for the reason that the debt of Prussia was at all times nearly nominal, and the present German empire owes no debt. Its war with Austria in 1866-7 resulted in the virtual annexation of kingdoms and duchies containing 10,000,000 of people, without borrowing a dollar, compelling the army it defeated, and the provinces it annexed, to pay nearly the whole cost of the war, and disbursing the remainder itself out of the revenue for the year.

The similar display of military strategy, and financial power, in her war with France, in 1870, resulted in the crowning of the Prussian king as Emperor of Germany in the French capitol, and the payment by France of a penalty of $1,000,000,000 for venturing into the war. The astuteness of Bismarck, and the iron will of William, could not have been so brilliantly exhibited within the last twenty years, but for the unpretentious labors of Frederick List forty years earlier.

The supply of capital is so considerable, and the rates of labor are so low, in Germany, that the country has marked facilities for cheap production. Being wholly without colonies, and never having used her armies to extend her trade in foreign countries, she has no means of "corralling" foreign trade, so as to compel it to pass through her territory, or enrich her people. Her manufacturers and merchants are compelled to obtain all their means of profit out of a little country, smaller than Texas, poorer than Arizona, by honest, hard, tough toil without a cent of coerced trade from any source. This is why both profits and wages are lower in Germany, than in England.

England is an empire of 260,000,000 of people, shaped in a pyramid, with 5,000 nobility and gentry at the apex, 980,000 landholders, rural and urban, next to the apex, 10,000,000 of traders, bankers and manufacturers next, who, with the landholders, boss the empire; 20,000,000 of disinherited laborers who have no stake in the country but to pay the taxes on whisky and tobacco and do the fighting, and 220,000,000 of Mohammedan, Pagan and other Hindoo subjects, who are skinned and peeled through enforced trade, for the benefit of British mills and landlords. Besides these, through her coerced treaties with Japan and China, Turkey and Egypt, and her purchased treaties with Portugal prior to the sovereignty of Brazil, England has come into the control, not through present cheapness, but through past coercion

and finesse, of the privilege, which in effect is an exclusive one, of supplying barbarian goods to about 400,000,000 more.

The nominal privilege, which other nations have, of sending manufactured goods into these countries at the same rate of duties, if any, as the English pay, is of the same practical value as the theoretical privilege which the whole world has of buying out the British nobility, by paying more for their estates than they are willing to forego to keep them.

Germany can not, therefore, by any protection she can afford to producers in her home markets, attain a rate of profits and wages equal to that which the British Empire has attained as the result of a perfection in machinery and an accumulation of capital which are due to three hundred years of protection to her home markets, and two centuries of foreign conquest, whereby she has enforced her ascendancy in the trade of 700,000,000 of people. No such prize was open to the German people of this century. But Prussia, and her associated powers in the Zollverein, adjusted the duties with an eye to the development, within the Zollverein, of every industry it had the power to foster. Their tariff contained hardly an *ad valorem* duty. It laid duties, not according to the values of goods, but their kinds. It threw every quality of goods, of the same general description, into a single class, without regard to their difference of cost, and levied one rate of duty upon the Prussian hundredweight, whether the fabric were muslin or canvas. This was to ensure that Germans should, first of all, be the exclusive producers of those raw materials (if they had the natural facilities for producing them), on whose abundance more advanced industries depended. If protection was the true road to cheapness it would prove the cheapest route to cheap raw materials. It threw together, under a common tariff of $36.40 per centner (110¼ lbs.), such diverse objects as hardware, perfumery, sewing-needles, wigs, clocks, and umbrellas, and all admixtures of them. Such a tariff, among demagogues, would have afforded a specious chance for cheap denunciation, as burdening the coarse goods of the poor, and exempting the fine goods of the rich, etc. But when these rates were first adjusted, in 1820–30, German manufactures were in their infancy, and the Germans saw that the coarser the manufactures the more certainly the Germans ought to be able to produce them themselves. The revolution in the character of German commerce is seen in the fact that forty years ago the German exports were double the weight of the imports, though of less value. In 1825 the com-

merce down the Elbe was 110,600 tons, while that going upwards was only 66,000 tons, Germany being constantly in debt to the money-lending powers. In 1868 the exports were but half the weight of the imports, though exceeding them in value. In 1850 the transportation of raw products up the Elbe was 315,000 tons, while the return of finished commodities down the Elbe weighed only 174,000 tons. Yet so greatly did her exports of commodities exceed her imports, in value, that the difference was constantly adjusted by an importation of bonds, or liens on the industry of other nations, the United States of America being a borrower of fully one thousand millions of dollars of German surplus capital between 1865 and 1873. Once they were selling raw products and cheap labor to the outside world, in exchange for cloths, silks, machinery, and finished wares. Now they are selling finished commodities, and skilled labor, at high prices, in exchange for the raw products of unskilled and agricultural toilers. For instance, in 1825 Germany exported to England 28,000,000 pounds of raw wool, receiving her pay in English cloth, thus showing that wool was cheaper in Germany than in England, while cloth was dearer. But in 1851, after twenty years of the Zollverein, Germany imported 25,000,000 pounds more wool than she exported, and exported 12,000,000 pounds of woolen cloths—proving that woolen cloths had become cheaper, and the raw wool dearer, in Germany than in other countries, the price of the raw material and the finished article approaching each other in consequence of the extensive development of German manufactures. Can it be contended that the Prussian farmers, as growers of wool and wearers of cloth, were not enriched by the higher prices they received for their wool, and the reduced prices they paid for their cloth? Or that as tax-payers the Germans were not profited by the fact that, while their manufactures were struggling into equality with those of England and France, the latter, in large measure, paid the German duties out of their own pockets for the privilege of selling their goods in German markets, thus relieving the German tax-payer of so much of his burden? That the Germans, as consumers, were enriched is shown by the fact that they consume more woolen goods, by 50,000 pounds annually, than they did under lower duties, and when they imported their cloths from England.

Again, in 1825, Prussia imported only 5,000 cwt. of cotton and cotton yarn, and in the twelve years ending in 1836 the amount had increased only to 8,000 cwt., or 6,000,000 pounds, which was

about one pound per capita per year for the whole Prussian population. After that period the importation into the states of the Zollverein of cotton and cotton twist was as follows: In 1836, 397,233 cwt.; in 1845, 1,018,150 cwt.; and in 1851, 1,362,-796 cwt. In the last year the export amounted to 159,241 cwt. —leaving for domestic consumption more than 1,200,000 cwt., or 130,000,000 of pounds, or not less than four pounds per capita for the whole population. Says Mr. Carey in his chapter on Prussia, in "The Principles of Social Science": "The weight of cotton goods exported was less than an eighth of that of the wool and yarn imported; and yet the value of that small quantity was 20,000,000 of thalers—$14,000,000—being almost enough to pay for the whole import. At least three-fourths of this large sum consisted of labor representing German food, thus readily enabled to go to distant countries." In 1826 "Germany supplied the world with rags and imported paper, of which her consumption was then but small. In 1851 all had changed, the net import of the first having been 37,000,000 pounds, the net export of the last having risen to 3,500,000. In the first period rags were cheaper than in other countries, while paper was dearer. In the second rags were dearer, while paper was cheaper. The prices of the two had greatly approximated, and, therefore, had the consumption of paper so much increased as to absorb not only the whole quantity (of rags) produced at home, but in addition thereto more than 30,000,000 pounds produced abroad."

In 1883 * the import of raw cotton had increased to 44,000,000 pounds per month, quite four times the importation of 1851; the exports of cotton cloths were twenty times, in weight and value, that of the imports. The imports of lead and copper ore were twenty times greater than the exports, but the exports of the metals were twenty times greater than the imports. The imports of wheat, in 1883, were twelve times greater than the exports, of oats six times greater, and of rye and buckwheat sixty times greater. Of glass the exports were sixteen times greater than the imports, but of hides and skins the imports were 3½ times greater than the exports. Of wood the imports were three times greater than the exports, but of musical instruments the exports were thirty-five times greater than the imports. Of locomotives the exports were seventy times in excess of the imports. Of made

* "U. S. Consular Reports," No. 32, for Aug. 1883, p. 359.

clothes the exports were seventeen times greater than the imports. Of leather and leather goods the imports were but half the weight of the exports. Of wine the imports were seven times the exports; but of brandy the exports were 250 times the imports. Of flesh the imports were three times the exports, but of starch the exports were nearly six times the imports. Of molasses the imports were one-sixth the exports, but of sugar the exports were 91 times the imports. Of woolen yarn the imports were three times the exports, but of woolen goods the exports were nearly eighteen times the imports. Of tar the imports were twice the exports, while of pitch the exports were ten times the imports.

From 1830 to 1854 the quantity of coal mined—a sure test of the growth of modern manufactures—increased from 7,000,000 *tonnes* (of 391 lbs. each) to 46,000,000 *tonnes*. In 1834 Germany produced 76,000 tons of bar iron; in 1850, 200,000 tons of bar and 600,000 tons of pig iron. The value of cotton and woolen goods exported, rose in 1851 to $25,000,000, the chief part of which consisted of the food that had been combined with the wool, in the process of converting it into cloth. As a consequence, the necessity for going abroad to find a market for food, had so greatly decreased that the net export from the country, that in 1825 was the granary of Europe, was but 10,000,000 bushels. Simultaneously with this development of manufactures, and especially of cheap iron, Prussia became able to build railroads, until she had one mile of road for every five miles of her land, besides loaning hundreds of millions of capital to other countries to build roads with, or—which is the same thing—buying their stocks when built. Travel became so common that but few of the people of Prussia failed to visit their chief cities, and thus a higher standard of taste in art, architecture, and music was diffused over all Germany. As the price of the farmers' products increased, and local markets near at hand sprang up at thousands of local centers, the farmers advanced from the early three-field system of agriculture, first to improving their land by rotation of crops, so as to keep it all in cultivation at once, and then to a rotation of manures, the highest development of skill in the preservation and improvement of the fertility of the soil. So great has the necessity become for a perfect system of tillage, to meet the demands of the German consumers, that the proprietors of land feel that they cannot afford to hold and cultivate it in large quantities, and hence the division of land, among a constantly increasing number of proprietors, is going on in Ger-

many, under protection, from a law of profit as natural as that which causes the increasing concentration of the land in England into the hands of a few, under free trade. In Germany the land is a means of producing wealth, in accordance with the principles of the highest of all arts, that of agriculture. In England it is a means, chiefly, of the ostentatious display of the fruits of a monopoly acquired by crushing out the industries of nations having a weaker military arm, or a purchasable tariff policy. Lands which would have been tilled by English farmers, had they been protected in their home market, have been turned into parks, pastures, and waste, with the profits of a trade in cottons, between the cultivators and spinners of Hindostan, the loss of which to the Hindoos has been made visible in the periodical famines in that country. Thus a grinding spirit marks the success of trade, as the spirit of reciprocity characterizes production.

By means of this minute division of land, in Germany, great diversification of employments, steady increase in wealth by production rather than by trade, a competency is brought within the reach of every German. The government has wisely cared for the education of the people as well as their productive industries. As a consequence, there is a strong, active, intelligent love of fatherland, an intelligence in the German armies which fulfills the adage that "bayonets think," and a capacity on the part of the people during war or peace to do any thing that man can do, and do it well. German literature and art are rapidly taking the lead in the world of ideas, as Prussian arms and diplomacy are in that of politics and nations. In theology, history, poetry, science, art, in universities and galleries, in books and paintings, in the stage and the church, Germany has achieved her greatest strides within the last half century. Nearly all of this accession of power in Germany is due immediately to the adoption in 1820 to 1834 of a protective policy. Without this she might have been industrious, but she would have been disorganized, poor, and a borrower. With it she has become united, powerful, and rich, indeed the strongest power in Europe. This period has placed her in the lead in learning, art, diplomacy, science, and war, as distinctly as the United States of America have within thirty years past taken and held the lead in political freedom, material and inventive energy, and the production of wealth.

193. Germany's Present System of Taxation.—The German Empire of 1786 included 289 states, among which were sixty-one free cities. In 1812 the Confederacy of the Rhine comprised

about half the German Empire, the other half being parcelled out between France, Italy, Austria, Prussia, and the Danish States. The German Confederacy of 1815-66 was formed with the Austrian Confederate States, the Prussian Confederate States, the Bavarian Kingdom, and Hanover as its leading powers, each of which were agglomerations, and twenty-nine other states, most of which were in part agglomerated states, containing in all 243,556 square miles and, in 1815, 51,300,000 population, and in 1865, 73,410,767 population. As the issue of the war of 1866, Austria withdrew from Germany, and, at the close of the campaign of 1870 against France, Germany underwent an internal change resulting in the constitution of 16th April, 1871, of the present empire. Into this empire are merged by force of conquest twenty-six sovereignties.* The laws relating to customs and commerce are wholly under control of the empire. Notwithstanding the large standing army the annual expenses of the government are small compared with those of England, France, or the United States, being only a third or fourth of either. The entire revenue for 1877-8 was only £25,530,403, of which taxes and duties, on provisions, were £12,652,690. Extraordinary revenue was £5,157,397, matricular contributions were £4,052,208, and the rest were minor taxes. This leaves to the several states of the empire their land tax, house tax, income tax, class tax, tax on trades, railway duty, and other direct taxes†—the total estimated revenue and expenditure of Prussia alone being £35,125,034, or considerably greater than that of the empire, of which it is the chief part. The class tax is virtually an income tax on all persons, subject to certain exceptions, who receive more than 420 marks and less than 3,000 marks, while the term income tax is reserved for the tax on incomes exceeding 3,000 marks, derived from either real estate, capital, or any trade, business, or paying profession. The trade tax is levied on commerce, hotels, restaurants, and innkeepers, manufactures and trades employing a number of persons, mills, navigation, warehouses, livery stables, and peddlers. The table (in mil-

* Prussia, Lunenburg, Bavaria, Saxony, Wurtemberg, Baden, Hesse, Mecklenburg-Schwerin, Saxe-Weimar, Mecklenburg-Strelitz, Oldenburg, Brunswick, Saxe-Meiningen, Saxe-Altenburg, Saxe-Coburg-Gotha, Anhalt, Schwarzburg Rudolphstadt, Schwarzburg Sonderhausen, Waldeck Reuss, Schomburg Lippe, Lippe, Lubeck, Bremen, Hamburg, Alsace-Lorraine. Area, 210,493 English square miles; population in 1877, 42,727,360.

† For a minute analysis of German taxes, imperial and Prussian, see U. S. Consular Reports, No. 32, August, 1883, pp. 395-405.

lions and tenths of millions) shows the relative productiveness of these taxes, in Prussia, in 1876, in marks (23.8 cents).

Population.	Class tax. (Klassen Steuer.)	Income tax.	Ground and House tax.	Trade tax.	Total.	Communal Taxes, 1876.					
						Personal tax.	State tax.	Monthly additions to state tax.	Other direct and indirect taxes.	Total.	Expenses of municipalities for public schools.
25.6	39.7	29.0	55.7	17.1	141.6	70.0	58.0	1.8	31.7	161.5	73.9

From this it appears that nearly one-third of Prussian state and local (communal) taxation is expended upon public schools. The cities of Hamburg and Bremen remain at present, by stipulation, free from the customs-imposts of the empire, an exception which will expire in a few years. Bavaria, Wurtemberg, and Baden also retain their taxes on beer, while the like taxes in the other states go into the imperial treasury.*

The German system, of adjusting duties largely by weight, renders it difficult to translate their tariff terms into ours, but all who investigate their system see in it a very determined effort to protect all German industries.

After the enactment of the new duties in 1879, designed to give a more emphatic protection to the iron and steel manufacture, the German Steel and Iron Industry Association published statistics received from 320 iron works, foundries, and machine works in various parts of Germany, showing that in January, 1879, just before the enactment, they had employed in these works 151,582 workmen, whose monthly wages were $2,280,375, while in January, 1884, the same works employed 202,888 workmen, to whom they paid $3,468,024 wages per month. The number of workmen had increased by 33.2 per cent., and the aggregate of wages by 52.1 per cent. per month. The average rate of wage per month on all the workmen had risen from $15.04 in the first period to $17.17 in the second, being $2.13 per month in favor of the laborer. From 1879 to 1882 the number of workmen employed in the machine works increased by 29.3 per cent., from 1879 to 1883 by 50.9 per cent., and from 1879 to 1884 by 52.9 per cent.†

* U. S. Consular Reports, No. 51, March, 1885.

† Consul Warner (Consular Reports, No. 42, June, 1884, p. 15) adds: "This gives an

While every thing has been done, that wise and economic government could do, to enhance the growth of the German people in wealth, yet in their competitions with other nations they work against many relatively greater advantages in their competitors, which no wisdom could overcome. Their country is not naturally a garden in fertility, but on the whole its soil is in the main niggardly, and much of it sterile or inferior as well as mountainous. Their area, like that of France or Austro-Hungary, is less than that of Texas. Their people have strong disuniting and disintegrating tendencies which have torn them into petty fragmentary states for centuries, and rendered great political courage, and an iron will on the part of William and Bismarck, necessary to weld their incongruous parts into one coherent state. Frequently, until 1866, these great chiefs found their plans thwarted by a Reichstag, or Parliament, determined to prevent their consummation, and as often these two men defied the action of the Parliament and overruled its non-concurrence. In 1866 Parliament passed an Act of Indemnity in favor of the government, owing to the conviction of the people that William and Bismarck, in maintaining the high efficiency of the army, had been wiser than the representatives of the people. Certainly, had Parliament had its way, the successes of the German state, in its wars with Austria and France, would have been less brilliant and the war might have proved disastrous, in which case the North German Confederation would still have been the second-rate power which it was on the accession of William to the crown of Prussia.

Meanwhile, however, the German people have led their brilliant career only through universal toil and sacrifice. The labor conditions are such that the women bear actually more than half the burdens of the several occupations. In a portion of the Wurtemberg Consulate, containing 100,369 males and 106,042 females, for each woman who supports herself in civil, church, or professional services (deemed genteel), there are five and a fraction who

---

increase of the single wages from 1879 to 1882, 14.6 per cent.; from 1879 to 1883, 15 per cent., and from 1879 to 1884, 19.2 per cent. Since 1879, the number of men employed in the iron works increased by 22.3 per cent., the total wages by 41.4 per cent., the single wages by 11.8 per cent.

"In comparison to those figures of 1879 there has also been an extraordinary large increase of labor and wages in the iron works. Since then the number of workmen has increased by 26.3 per cent., the total wages advanced by 41.8 per cent., and the single wages by 11.8 per cent.; which, too, had taken place at a period when many works in England—and some in France and Belgium—had to suspend operations and thousands of workmen were thrown out of employment, with considerable reduction of wages."

live by trade and commerce, nine and a fraction by housework, twenty-four and a fraction by mining, foundry and building work, and sixty-three and a fraction by agriculture, cattle raising, forestry, and fishing.

Comparing Germany and the United States, the standing army of men withdrawn from industry in Germany, as soldiers, is but little more than one per cent. of the population, while in America the standing army of women, withdrawn from productive industry to live in ladyhood, is about twenty-five per cent. of the population, since only one American woman in ten is engaged in industrial occupations.

In the district above referred to, in Germany, 160 women work in quarries, 71 make knives, 1 makes mathematical instruments, one is a chemist, 44 make explosives, 1907 are paper makers, 15 are tanners, 54 are bookbinders and boxmakers, 2 are coopers, 355 are turners, 753 sew, 3 are notary's clerks, 76 are teachers, 67 are authors and writers, and 16,109 make their personal living by toil at agriculture, cattle raising, forestry, hunting, and fishing.

In agricultural pursuits, to 32,714 male toilers there are 39,218 female toilers. The women plant, sow, and prepare the soil. They hold the plow, which is generally drawn by a pair of cows, as oxen are too expensive and yield too little return. Many of them carry the manure into the fields in baskets strapped to their backs. They do most of the haying and harvesting, and thresh much of the grain with the old-fashioned hand-flail. They go with the coal carts, and shovel the coal into the cellars, while the male drives and rides. They draw the milk into town in a hand-cart—a woman and a dog generally making the team.* Unconquered by these difficulties, the German peasant works with the same plodding industry and assiduity as has given fame to the German scholars, musicians, and soldiers, and a foremost position among nations to the German people.

194. Revenue System of Russia.—Russia is painted in such opposite colors by opposing theorists, and stands in such strong contrast to Western Europe, and especially to America, that it will be difficult to present a picture of her economic system that will be accepted as accurate by those who have drawn their views of Russia from unlike sources of information. In her government and social economy, Russia combines all the absolutism which western nations pride themselves in having cast off, with

* U. S. Consular Reports, "Labor in Europe" Report, p. 29.

a degree of socialism and communism in which the land and labor reformers of England and America ought to be able to see the perfect realization of all to which their theories aspire. Russia spans one-sixth of the land surface on the planet. That system of communal ownership of land, which has given place to individual ownership in Western Europe, still prevails in Russia.* In the *Mir* or rural commune, every male is, from birth, an owner of a share in the land of his commune. This share is inalienable for debt, crime, or even absence, for though he go to a distant part of the empire, or into trade, the *Mir* assumes that he will return. His land is tilled on his account, but at his expense, in his absence, and awaits him like a vacant chair at the home fireside. The government of the *Mir* is like that of a family. No one outside is expected to interfere. It is democratic, and is carried on more like a family than a township, and more by talking than by voting. It has one nominal chief or ruler, but every one has his say. In the towns the *Artel* unites the artisans into a commune, as the *Mir* unites the agriculturists. No Russian subject is the exclusive owner of his own time or services. They belong to the commune. On the other hand, no one is turned out to beg or die as a pauper, with no refuge but the workhouse and no guardian but the state. The commune employs all burghers and peasants, whether farmers or artisans, apportions the means of support to all, pays their debts and taxes, punishes their delinquencies, and usually makes their contracts. The lands are tilled under the three-field system, in the working of which one-third of the land is always fallow. Above the burgher, or peasant class, the merchants form a sort of stratum or grade. Then come a class made up of functionaries, officials, artists, and clergy—the professions. Above these are the nobility, whose rank is not always dignified by wealth.

While the form of government is extremely autocratic, the working of it is sometimes the reverse. Thus, in effecting the emancipation of the serfs, above a million and a half of persons were reached and advised with, in person, by the various committees, national, provincial, and local, in the interval in which the matter was under consideration, viz., from 1856 to 1863. As the result of this wide consultation of interests, and of the appointment of arbitrators innumerable, to arrange the allotments of land to the serfs, and other details, the emancipation of 23,000,000 serfs was

* W. Hepworth Dixon, "Free Russia," p. 154.

effected without loss of life, or expenditure of money, such as civil war would have produced. Every freed serf became a land-owner.

One of the most potent agencies, in paving the way for emancipation, had been the employment of many of the serfs in manufactures, which had itself been due to the persistent protection of Russian markets to Russian producers, which has been maintained from the reign of Peter the Great to the present time.

The customs duties are intended, in many instances, to prohibit importation rather than to obtain revenue. The area of Russia is so diversified, and the wants of the mass of the people so simple, that the need of heavy importations is not felt. Hence out of a total revenue of £93,076,518 in 1877, only £9,106,700 were obtained by duties on imports. The chief sources of revenue are the poll and personal taxes, the excise on liquors, salt, tobacco, and beet sugar, customs duties, crown revenues, and sales of lands. Russia had, in 1879, 27,927 factories, employing 685,245 hands, being only about one-fourth the number employed in manufactures in the United States. There is an enormous home flax, linen, woolen, hemp, and cotton spinning industry, which does not appear in these statistics, but which in hemp, linen, flax, and woolen is estimated to exceed in its product that of the factories.

Russia is as remarkable for its excessive employment of children as Germany is for its extensive employment of women. Over 60,000 children labor in the Russian factories. The singular plea is made for their employment, that their labor is worth more than that of adults, as the latter are so often impaired in their value as workers by drink, while the children have not learned the use of liquors. One of the lessons taught by the Russian tax system is the tendency which raising a revenue by taxes on liquors has, to create a sort of partnership between the government and the producers of liquors. The Czar Nicholas in particular, but his successors also, on several occasions have declared the temperance movement illegal, and the temperance unions and pledges mischievous, because of the tendency, which discontinuance in the use of liquors would have, to diminish the revenue. Those who are most familiar with the practical workings of the internal revenue system in the United States, perceive a similar tendency toward a partnership between the liquor producing interest and the politicians in power, though it manifests itself in a different way. Here, the higher the tax the larger the capital required to carry the stocks, and the greater the tendency to concentrate the business into a few hands. These few regard the internal revenue tax

on their product, as the fence which surrounds their monopoly, and protects their profits. At the same time they obtain such legislation from Congress as virtually defers the payment of the tax, in many cases, until sales are made. For these important advantages they can well afford to become the largest contributors toward the cost of running those primary conventions in which candidates for office are selected. These primary conventions for selecting the candidates determine the *personnel* of the government to be chosen, as the same class of men, and very often the same men, control the conventions of both parties, and also of those minor third and fourth parties formed to defeat one or the other of the two main parties by drawing off a portion of its usual voters. In this manner the producers of liquors have their political influence and power greatly magnified, by the tax which is supposed to rest on them as a heavy burden, a sort of punishment for their calling, and a necessary aid to the principles of those who seek to suppress wholly the sale of spirituous liquors.

The practical socialism, which underlies the Russian system of land cultivation and manufacturing industry, extends to Russian imperial finance. The imperial government, for eighty years, has been in a close partnership with all the banking and money-lending agencies of the empire. The paper money, which has been issued in large quantities in Russia, since 1800, has been issued jointly by the government and the banks, and when redemption or retirement of any portion of the paper money has been attempted, the government and the banks have co-operated like parts of one mechanism. In 1840, after the Russian paper money, or bills of credit of the empire, had been at a discount since 1815, whereby three and a half roubles in paper would only purchase one rouble in silver, the government, by joint action with the banks, retired the depreciated currency at its actual value and issued a new one at par with silver, at the same time permitting all private contracts incurred in the depreciated currency to be paid in that currency, and making only new contracts payable in the new currency.* At a time when there were 595,776,000 paper roubles in circulation, their volume was reduced, by their retirement and the re-issue in their stead of a new currency redeemable on demand in silver, to 170,221,715 roubles. Redemp-

* *La Revue des Deux Mondes*, January and March, 1864; articles on Finances of Russia, by M. L. Wolowski. Hunt's *Merchant's Magazine*, vol. 30, p. 735; vol. 31, p. 226. "Russia," by Karamsin, Tooke and Segun, edited by Kelley, 1855, vol. 2, p. 466. "Modern Russia," by J. Eckbardt, p. 124.

tion in silver, on the new paper money so issued, was maintained until the outbreak of the Crimean war in 1851, when further issues of paper money placed the precious metals again at a premium. An effort was again made, in 1862–3, to redeem the paper money, merely by borrowing a large sum in coin and paying it out in redemption of the paper, in the vain hope that holders of government notes would have their confidence in the notes so restored that they would cease calling for the coin before the government's stock of coin ran out. In this the government was mistaken, and the scheme failed.* In 1865–70 Mr. Horace Greeley proposed, in the *Tribune*, for the United States government, upon its "greenback" notes, the same scheme of redemption attempted in Russia in 1863. It was for a time famous for the apothegm, "The road to resumption is to resume."

It is a noteworthy fact that while Russia is spoken of by English and German critics as having passed through "national bankruptcy," by this act of "scaling her currency," it reduced a redundant and depreciated paper currency to one-fourth its previous volume without occasioning a single bankruptcy among the Russian people, whereas the policy pursued in the United States in 1865 to 1879, of forcing a depreciated currency gradually up to par, by rapid extinguishment of the debt of which it formed the most useful part, involved a period of individual stringency from 1873 to 1878 of five years' duration, and extending to millions of persons. There is, therefore, in autocratic Russia a closer and more socialistic solidarity between government and people, in two aspects, than is met with in western nations. The imperial government is more socialist as respects the banks and money. The communal system is more socialist as respects land and industry. The various ranks of society are within themselves more socialistic, since they have much to do with distributing the taxes which fall upon their own order. Out of this degree of socialistic solidarity grow three important sources of exemption from taxation. The Russians have not been taxed, as the Americans were, in the sum of ten thousand millions of dollars, to effect emancipation, nor in long periods of individual bankruptcy, to effect resumption. They escape, by their communal system, the heavy taxation which the English undergo to provide for paupers. They secure unity and nationality between races the most diverse, without civil insurrection or intestine war. The czar is trying to induce

* "Condition of Nations," by Kolb and Streeter; article on Russia.

the people to take on themselves the burden of local self-government, but they seem reluctant to do so. The empire is divided into fifty provinces, each of which is invited by the imperial government to elect a *zemstvo*, or local legislature, to provide in a manner somewhat like the English local boards, or our American county boards of supervisors, for matters of education, roads, bridges, and all local interests. The local experiment seems to have no vitality. Members-elect have to be fined to secure their attendance. The elements of the government which are vital are the commune, the empire, the army, the church, and the banks, or money-lenders. The nihilist faction does not represent poverty, like the anti-landlord party in Ireland. It consists chiefly of gentlemen and educated men, who hang on at the universities, and fail to find an active career for themselves in the army or the empire. Men whose lives are spent in study, without useful action, become cynical and assail society and the existing, with equal rancor, whether they dwell in democratic republics or under the black eagles of Russian czardom.

195. English Colonies.—The greater the number of tariffs and revenue systems we examine, the stronger becomes our perception of their average uniformity. Austria-Hungary, Italy, Servia, Roumania, and Spain in Europe, and on the western continent Mexico, Brazil, Chili, Buenos Ayres, and Colombia, and the various colonies of England, have revenue systems essentially like those of France, Germany, and Russia. All mingle direct with indirect taxes ; all, or nearly all, bring some taxes to bear on certain salient taxable objects, such as persons (poll or capitation taxes) lands and houses, or fixed capital, conveyances, descents of property, imports or exports, or both, salt, liquors, wines, opium, tobacco, and beer.

It is sometimes alleged that, of the English colonies in Australia, Victoria and all the others are protective, but New South Wales is strongly for free trade. It may be hazardous to impeach, at a distance, a local opinion of this sort, and it is certain that the Victorian tariff includes duties calculated to protect certain branches of production, such as glassware, carriage materials, upholstery and furniture, musical instruments, wheat, and oats, grates, stoves, watches, etc., which are free of duty in New South Wales. But it is equally true that New South Wales protects the manufacture of galvanized iron, while Victoria admits it free, and protects also the manufacture of paper. Indeed, most of the duties levied under both tariffs are protective in some degree,

and they are about seventy in number in New South Wales and about three hundred and thirty in Victoria. All the larger colonies of England except India, including Australia, New Zealand, Canada, and Tasmania, are permitted to, and do in fact protect their domestic industries against such of England's products as they think may subvert their own, and the same duties are paid, in them, on imports from England as on those coming from other countries.

In Canada, the protective policy, called there the national policy, was adopted by the election of the government of Sir John A. Macdonald, and has since been pursued. It has been coupled with a policy of costly internal improvements, such as the Canadian Pacific Railroad, and of important public works, with subventions and loans. Doubtless all these policies will stand or fall together, though the principles they involve, while affiliated, are not identical. The cotton, woolen, iron and steel, leather and wooden-ware manufactures have, since 1879, sprung forward into greater prominence than previously, and the prevailing party continues to hold that the protective policy has given more commodities for consumption, and better wages to labor.

The national policy in Canada, however, seems to include a sentiment in favor of aggregating the various provinces of the Dominion into a condition of stronger defensive unity against the United States, *i.e.*, of converting Canada into a military power capable of resisting the United States in the event of war. So many influences, tending toward expense, may make the drain upon Canadian resources a serious set-off to the advantages obtained from the protective policy, which, in themselves, are clear and strong, but can not stand too much handicapping.

The peculiarity which is most striking, in the position of Canada, is that her juxtaposition to the United States has had great influence in causing England to withdraw from the attempt to govern her in fact, or to do any thing in the smallest degree disagreeable to the Canadian people. The possibility of the mother country pursuing such a policy is tacitly regarded, by the statesmen of both countries, as tending to provoke Canada to annexation to the United States. In this way the United States becomes the passive, but potential, author of Canadian liberty. As England can not, with dignity, pursue unlike courses toward colonies so much alike, in every other respect than that of their nearness to the United States, as are the Australasian and Cape colonies, the United States becomes the tacit emancipator of the entire chain of British colonies.

Until 1866, the great republic performed this good office for her neighbor involuntarily and without return. Canada had nearly as free access to all American markets as the American people. On the termination of the reciprocity treaty of 1854 with Canada, in 1866, the United States, having a large national debt to provide for, raised the duties on Canadian products in accordance with her own interests. In lumber, coal, fish, barley, potatoes, wheat, rye, hops, eggs, live stock, horses, meats, etc., Canadians were not likely to obtain any other or higher price for their product, in the United States, after a duty was imposed, than they would have obtained before and without it. All these products had a standard price, gauged according to the ratio of the whole supply to the whole demand, and since all these were articles of export from the States, the import from Canada was no part of the efficient supply whatever. It was simply a supererogation, like an additional stream of water brought into a fountain which is already running over. It determined neither the level nor the quantity. So these Canadian products neither added to the American supply, nor lowered the American price. They only pushed out the quantity of the American commodity which they displaced, into an export, or caused a cessation in its production, at a somewhat more easterly point on our frontier of cultivation than the production would otherwise have reached, one or the other.

For instance, of lumber the United States, as a whole, are exporters, *i.e.*, the price of lumber along the Atlantic coast is such that every year about $28,000,000 worth of lumber must be sent to Europe and elsewhere. This indicates an average American price, on the seaboard, lower than in Europe. But Canada also sends about the same quantity of lumber abroad as the United States, thus showing that the two countries are ready to take the European price in preference to their home price for about $27,000,000 worth of lumber, which to the Canadians is two-thirds of their market and to the Americans is one-fifteenth or one-twentieth of their market. The American price being thus determined by their own supply, if Canadians are taxed a small percentage of the value of the lumber, on the privilege of bringing it into the American market, the tax becomes an addition to the Canadian cost of production, no different, in its incidence, from what it would be if it were an increase in cost of transporting or chopping it, or a royalty on the stump. The Canadian producer, if he pays it, suffers a deduction from his profits, but can not charge it over.

As a deduction from his profits, it may have one or several of these effects. It may depress the price of lumber in Canada, and will in those portions of Canada which are so near the American market as to leave the profit of selling in the American market, after paying the duty, greater than the profit of sending the lumber across the ocean. It may discourage the production (bringing forward) of certain portions of lumber, from Canada, for the American market. It may leave certain Canadian producers selling at two prices, one a Canadian price, high enough to reimburse them for the burden they are under in paying duties on the portion they sell to American purchasers, and the other an American price low enough, so that, with duty added, it just reaches the average American price.

The conditions thus traced out, as to lumber, apply with equal force to the importation of coal, barley, wheat, hops, eggs, rye, and most farm and forest products, from Canada into the United States. Out of all these, the United States collects a revenue of about four to six millions of dollars, and I can not resist the conviction that this revenue can not be charged over, by those who pay it, to American consumers of these products. It seems to be a tax levied by the United States on Canadian industries, and is nearly equal in amount to the revenue paid by Canadians toward the support of their own government.

196. China and Japan.—While England reluctantly permits Canada and Australia to protect their manufactures against her own competition in any degree they think proper, she vetoed in 1878 an attempt to do this in India, and holds China and Japan resolutely fast under treaty obligations which were forced upon them by war, and which are much lower and less protective to both those countries than their governments, if relieved of all terror of military coercion, would be glad to enact.* England, that dare not lay a tax, for her own benefit, in Canada or Australia, or plant a gun or land a regiment to prevent either of those colonies from shutting out her manufactures by protective or prohibitory tariffs, though they are called subject provinces, has no hesitation in dictating to the populous and so-called independent empires of China and Japan what imports they shall admit, and at what rate of duty, and in forcing China by war to admit as an

* Richard Cobden, speaking in Parliament on February 26, 1857 (see Speeches of Cobden, by Bright, p. 382, "China War"), said: "I only wish that we had not five ports, but one port, in France, Austria, or Russia, where we should have the same low tariff as we now have in China."

import the detested opium of India, which the Chinese government sought to exclude.

Every other feature of the Chinese Empire has been the subject of interested inaccuracy and mercenary misrepresentation, except the fact which, to an aggressive foe, is fundamental, that its people are incapable of opposing to foreign invasion a military resistance proportionate to their numbers. In 1839 to 1840 Great Britain declared war upon China, because of the carrying out, by the Chinese, of an agreement for the destruction of all the opium held by British merchants in China, which treaty had been solemnly proposed and made by Great Britain's own representative or superintendent of trade, Captain Elliott.*

The world has been made currently to believe that the English rendered a public service to mankind "in opening the Chinese ports" in 1840, to commerce, thus overcoming an anterior perpetually exclusive policy, which had been native and national on the part of the Chinese from time immemorial. In fact, the policy of exclusion had been recently adopted by the Chinese only as a police regulation to prevent the introduction of opium,

---

* The story of this infamy is thus briefly told by the "Encyclopædia Britannica," Art. China: "The chief cause of complaint adduced by the mandarins was the introduction of opium by the merchants, and for years they attempted by every means in their power, by stopping all foreign trade, bv demands for the prohibition of the traffic in the drug, and by vigilant preventive measures to put a stop to its importation. At length Captain Elliott, the superintendent of trade, in 1839, agreed that all the opium in the hands of Englishmen should be given up to the native authorities, and he exacted a pledge from the merchants that they would no longer deal in the drug. On April 3, 20,283 chests of opium were handed over to the mandarins and were by them destroyed —a sufficient proof that they were in earnest in their endeavors to suppress the traffic. This demand of Commissioner Lin was considered by the English government to amount to a *casus belli*, and in 1840 war was declared. In the same year the fleet captured Chuson, and in the following year the Bogue forts fell, in consequence of which operations the Chinese agreed to cede Hong Kong to the victors and to pay an indemnity of $6,000,000. As soon as this news reached Pekin, Ke Shen, who had succeeded Commissioner Lin, was dismissed from his post and degraded, and Yi Shon, another Tatar, was appointed in his room. But before the new commissioner reached his post, Canton had fallen into the hands of Sir Hugh Gough, and shortly afterward Amoy, Ningpo, Tinghai in Chusan Chapoo, Shanghai, and Chin Keang Foo shared the same fate, and a like evil would have happened to Nanking had not the imperial government, dreading the loss of the "Southern Capital," proposed terms of peace. After much discussion, Sir Henry Pottinger, who had succeeded Captain Elliott, concluded, in 1842, a treaty with the imperial commissioners by which the four additional ports of Amoy, Fuh Chow Foo, Ningpo, and Shanghai, were declared open to foreign trade and an indemnity of $21,000,000 was to be paid to the English."

In 1858 to 1870 another war for indemnity was begun by the English, in which the French assisted, and the allied forces, under Lord Elgin and Sir Hope Grant, marched to Pekin and obtained a "war indemnity" of 8,000,000 taels.

and because such had been the violation of their pledges on the part of the English, that it had been found impossible to shut out opium without prohibiting foreign commerce altogether. Thus the English are able to paint, as barbarism, a desire for exclusion which they themselves produce; to herald as a boon to civilization, the opening of Chinese ports to opium alone, since apart from the opium evil there had been no desire to close them; to exact a money indemnity for the cost of killing off the Chinese, for the crime of assuming that a treaty of cessation of the opium traffic, authorizing the destruction of opium, which had been solemnly ratified by Great Britain herself, entitled China to the rights it guaranteed, and meant what it said; and finally, to brand as a nation of liars, a race toward whom the British kingdom has never put itself on record except by acts of monumental perfidy.

In 1860 the Hon. Anson Burlingame was appointed by the United States as minister to China, and continued for years to perform his functions toward that government in a manner that won for him the marked trust and affection of the Chinese government. When the period for his return to the United States arrived, the Chinese government requested him to accept the post of Minister Plenipotentiary for that government to all the western powers, which he did. In this, and antecedent, and many subsequent acts on the part of the Chinese government, it has manifested a strong desire to bring itself into closer relations with a government with which friendship would not mean subjugation.

The early death of Mr. Burlingame cut short the hopes which the Chinese government, or nation, may have based on his talents and energy, of being permitted to stand toward western treaty-making powers as an equal. To their simple minds it was a mystery that the act of a British envoy and agent authorizing a destruction of opium, and consenting to the suppression of a baneful traffic, should be a cause of war on the part of his own government against the government which assumed that a British bargain meant what it said. The well-known purpose of the Chinese government, in employing Mr. Burlingame upon his diplomatic mission, was not so much to obtain new treaties, as to make it possible that treaties of any kind, in behalf of China, should have the weight of a moral obligation on western nations. A rectification of international ethics might bring the western nations, or at least the United States, into a position of intimacy,

confidence, and trust, which, however valuable it might prove to be, but little has yet been done to deserve. While the conquest of China by England is no longer expected to follow that of India,* the entire trade of China is held, as in a vise, by English merchants, by and through the treaties obtained by past coercion, and the readiness to renew that coercion when necessary.† America and all other countries, though nominally entitled to admit their products into China at equal rates of duty, are virtually shut out of the trade with China through the indirect effects of the state of armed precedence and quasi-subjugation effected by the English. The way to stop the tendency of Chinamen to leave China, and flood the United States, is to restore to them the absolute autonomy of their own country. If Great Britain shall be permitted to continue her present degree of precedence in the trade with the Chinese, her system of taxing that empire through the profits of enforced trade and the subversion of Chinese manufactures needs only the aid of railroads and banks throughout the empire to make it as complete a success as in India. In that case it will as completely destroy the Chinese system of industry as it has that in Hindostan. An enormous exodus, and deportation of the Chinese, would follow, to the American continent, as well as decimating famines and pestilences in China itself. America is the chief silver-producing country of the world, China the largest silver-consuming country. In America, silver bullion is worth only one-twentieth its weight in gold. In China, it is worth two-twentieths. Yet such is the grip of England, on the trade of the Chinese, that America pays for her imports from China in the dearer metal, and begs her small quota of trade as a crumb from the English table.

Most western misinformation concerning China has been obtained, either through commercial smugglers intent on violating her laws, temporary ambassadors appointed to convert this clandestine intrusion into direct conquest, or Christian missionaries

* Cobden, in "Speech on Chinese War," says: "I am not sure that America would acquiesce in your making an India of China. Does any body who knows any thing of China believe that you could annex it? It is an empire of 300,000,000 people. How are you to govern them?" etc.

† In the speech above quoted of Cobden on the China war, he said: "There are a great many merchants in China who are engaged in a traffic of a very exceptional character which is detrimental not merely to the health but to the morals, to the souls and bodies of the Chinese. . . . And I doubt whether it is always for their benefit as merchants that they are placed in a position which enables them to summon to their aid an overwhelming force, to compel the authorities to yield to their demands."

whose pious zeal would naturally magnify those qualities of the Chinese character which place in the strongest light the apparent need of missionary efforts for their conversion. On the other hand the Chinese government, never officially responsible for any information communicated, might easily learn without rebuke that exaggerated statements of the numbers, wealth, or even wickedness of the people had been gravely published by outer and "barbarian" nations, if such errors seemed likely to lessen the danger of invasion, or the probabilities of cheap and successful aggression.

The area of China proper is about equal to one-half the area of Europe, or to the whole of the central valley of the United States from the summits of the Alleghany or Appalachian range, to the Rocky Mountains, and from the Gulf to British America. It has an army less in numbers than that of a single European first-class power, say France, Austria, or Germany, viz., 240,000 men actually in service, and a nominal paper force of 800,000 men not withdrawn from other occupations. The entire army is also the police force, and is chiefly employed in police duty. The total imperial revenue is stated at only £25,175,000, or less than one-fourth that of the United States, Great Britain, or France, which was estimated in 1875* to be raised in the following proportion, viz.:

A certain tax on provisions	£ 6,333,333
Land tax	5,703,001
Customs	4,752,001
Salt	1,584,333
Sale of titles and privileges	2,256,666
Miscellaneous	4,546,666
	£25,175,000

These figures show on their face, by the unnatural repetition of 3s and 6s, that they are arrived at by taking the total, by guess, and dividing it into fractions according to the same system of guesswork. This, however, is typical of the mode in which all statistics concerning China have been given to the western world.

The estimated revenue and army, above given, would indicate a population in China, of from 80,000,000 to 120,000,000 only, or say twice that of France, after making every allowance for the timidity of the people, their aversion to war, and the higher value of money than prevails in western nations.

* "Condition of Nations," by Kolb, p. 869.

Yet the population of China has been persistently stated by western nations at from 430,000,000 to 560,000,000 of people. But no census has ever been published by authority of the Chinese government. The statistics sometimes spoken of as censuses are really summaries * or totals, reported by foreigners as having been obtained by them from some distinguished mandarin or "learned pundit" of the empire, based upon some alleged census. Not only is the Chinese government responsible for none of these figures, but the fact that any mandarin is responsible for them rests on the testimony of an intermediate information and translation. Malte-Brun denounced as a fabrication the alleged census for 1792, furnished to Sir G. Staunton by the Chief Mandarin Chow-tin-jin, and which made the population of China proper 307,467,200, because the totals for the provinces were all in round numbers and those for two of the provinces were alike. In the chart of Mr. Martin, the area of two of the provinces is identical, and their populations so nearly so as to suggest that one was copied from the other. J. R. McCulloch distrusts altogether the alleged Chinese censuses, particularly the modern increase of population which they exhibit, "because China had been long settled and civilized, her public works had been undertaken and completed at a remote period, and the arts have been stationary for ages among her people," and thinks the (alleged) "rate of increase is such as could have been realized, only in an unoccupied and very fertile country, by a people far advanced in the arts, and that it is all but absurd to suppose that it should be realized in an old, settled country, with stationary arts, like China." De Guignes, after a careful and acute comparison of the evidences of population in China with those in Holland and France, says: "All these reasons clearly demonstrate that the population of China does not exceed that of other countries." R. M. Martin, compiler of the "Statesman's Yearbook," says that the popular estimate of 425,000,000 souls for the empire and 405,000,000 for China proper "rests upon various missionary reports, none of which can lay claim to be more than vague estimates."

A survey of the censuses themselves compels us to agree with these opinions of Malte-Brun, McCulloch, De Guignes, Martin, and the others who have written on this subject. The first alleged census dates in 1393, prior to the Tartar conquest, when China was

* The data concerning the population of China as here presented were first published in an article by the writer in the *International Review* for 1878.

under its native emperors. It states the population of China proper at 60,545,811, or one-half more than the present population of either France, Austria, Germany, Great Britain, or the United States. Three hundred and sixty years afterward, in 1755, when the population had been fully brought under Tartar government, it was numbered at 101,328,258, being an increase of only ¼ of one per cent. per annum, which would be very fair. But thirty-nine years afterward, in 1792, the census furnished by the mandarin to Sir G. Staunton, and denounced by Malte-Brun, assigns a population of 307,467,200, or fifteen-fold greater than it had been eighty years earlier, which would be an increase of about five per cent. per annum, or twenty times the rate of increase during the preceding period, and several times greater than has been known even in the United States. Meanwhile the four censuses attributed to the Tartar dynasty during the fifty years from 1662 to 1711, in which it had not complete sway over the inhabitants of the southern and western provinces, exhibit the population of China proper at 21,068,600 in 1662, 25,368,209 in 1668, 23,312,200 in 1710, and 28,605,716 in 1711. The missionaries, to whom we are indebted for the larger estimates of the Chinese population, account for these barren censuses by the theory—for which there is no proof—that, during this period, the Tartar emperors counted in the census only the people over whom they exercised actual sway; but, on the contrary, in the work of John Francis Davis, Esq., late H. B. M. chief commissioner in China, entitled "The Chinese: A General Description of China and its Inhabitants" (1840), we find (page 351) that the same discrepancy is attributed to the fact that the census taken in 1710 was taken with a view to distribute according to it the poll-tax and military service, while the census taken in 1793 was for the avowed object of apportioning government relief during periods of drought, inundation, and famine. A return fifteen-fold greater was made, when alms were to be distributed in the ratio of the population, than when a poll-tax was to be assessed. This will not seem strange to Americans, who have observed that in those of our States where the chief burden of the tax rests upon lands in proportion to their value, the lands are assessed at only one-third (in New York) to one-fifth (in Illinois) of their value; whereas, were the Government to propose a universal distribution of live-stock, seeds, and greenbacks, in proportion to the value of the lands in the several States, the lands might possibly be returned at from three to five times their value. Mr. Davis

refers, "on the authority of a Chinese work of some note," to a census said to have been taken in the seventeenth year of Kea-King (1812), making the population 360,279,897; while Dr. Medhurst, a missionary, in his work on "China: Its State and Prospects," quotes Dr. Morrison as having obtained, in 1790, "exhibits" of the population as then amounting to 143,125,225. Here is a bald discrepancy, between two statements only twenty-two years apart, of 217,154,672, or nearly two-thirds. Commissioner Davis explains the process of census-taking thus:

"When a census is especially called for by the emperor, the local officers just take the last one and make a lumping addition to it, in order to please his Majesty with the flattering idea of increase and prosperity. Now, although it is true that the enormous census of 330,000,000 was not made to impose on foreigners, yet it might have been made by this proud nation to impose on themselves."

If we pursue these estimates in detail, they resolve themselves into contradictions as palpable as those which pertain to them in mass. Wherever actual statistics exist, the three indices of density of population are: (1) The presence of machine power; (2) the abundance and rapidity of means of transportation; and (3) the large ratio of the area of cultivated lands to uncultivated. The first two are entirely absent in China. No horses or mules, camels or oxen, and very few asses are kept, and nearly all transportation by land is on the backs of men. This confines population to the river-banks, leaving the plateaus with a far sparser population, and less tillage, than in Europe. Belgium, with a population of four hundred and thirty-six persons to the square mile, brings fifteen-seventeenths of her land into cultivation. New Jersey, having only one hundred and eight persons to the square mile, brings half her soil into improved lands, and one-third into actual tillage. In China, on the contrary (according to the statistical chart prepared by Mr. R. Montgomery Martin, her Majesty's treasurer for the colonial, consular, and diplomatic service in China, and member of the Council of Hong Kong, also compiler of the "Statesman's Year-book," and an experienced and careful statistician), all these figures are reversed, and ordinary principles concerning the population and the factors incident to their support are set at nought. Even Mr. S. Wells Williams, in his work on "The Middle Kingdom," while disposed to believe the Chinese population to be very large, discredits as "unparalleled" and needing further proof the enormous averages

of 850, 705, and 671 inhabitants to the square mile respectively for Kiang-su, Nghan-hwui, and Chih-Kiang—districts where two-thirds of the lands are uncultivated. The return indicates 3,200 to every cultivated square mile in Nghan-hwui, which is a ratio eight times greater than in Belgium. A chart presented by Mr. Martin contains some statistical information, from which many interesting and instructive comparisons may be obtained.

By this it appears that in China proper but one acre in six is cultivated—a datum which, if it has any such basis in fact as these elaborate returns seem to indicate, wholly overthrows the dense population theory. Doubtless, if alms and relief were distributed in the ratio of cultivated acres, an immense area of cultivation would be returned. Moreover, the army which results from and holds in subjection this alleged population, nine times as great as that of France, is barely as large as that of France or Germany, and less than that of Russia! It is not a little singular, too, that while the Chinese Empire, including Mantchuria, the Corea, the Mongol Territory, Thibet, and other outlying provinces, has an area of 4,098,823 square miles, of which only 1,297,999 square miles belong to China proper, yet we find the population of the exterior provinces authoritatively (?) stated at only about 2,000,000. Is this to be accounted for on the theory that relief is never sent into the provinces in case of famine, or do the tendencies toward population suddenly disappear with the boundary line of the Middle Kingdom, wherein provinces as mountainous and sterile as Switzerland appear to be populated as densely as Illinois?

Comparing the chart with European populations, we find that Belgium, a manufacturing center, making use of vast machine and coal power, and occupying the position of a metropolitan province toward all Europe, and having a population of 436 persons to a square mile, is exceeded by the *ratio* of Chih-le, equal in area to five Belgiums, Shang-tung, equal in area to six Belgiums, and is nearly doubled in ratio by Kiang-su, Nghan-hwui, and Che-kiang, equal together to twelve Belgiums; and yet one of these provinces is set down as "sterile," and another of them as "very hilly but fertile." Nearly the sole machine in use, in all these provinces except, the loom, is that by which the priests succeed in bringing one hundred thousand different printed prayers at once to the eye of Joss. A buffalo hitched to a rude stick draws the plow, and the rice is pounded to flour in a mortar, as in the age of prehistoric man.

Here, however, arises an economic riddle which it would be most interesting to clearly solve. Is it possible that the substitution of human labor, both for animal power and for machine power, facilitates such a multiplication of the human species, and such an economy in their support, as causes an increase in the number of human beings proportionate to the deprivation of animals and machines whose places are thus supplied? In short, in estimating Chinese population, for economic purposes, must we estimate that their number will be as much greater than that of the people in Western nations which turn out a like industrial result, as the number of people in the Western nations would be greater than it is, if all the cattle, horses, and live-stock of Western nations, and all their machinery, were included in the census according to their "man power"? In dispensing with the aid of cattle, horses, mules, and machinery, do the Chinese make room for an increase in their relative numbers proportionate to the number, and labor power, and power to consume food as well, of the cattle, horses, mules, and flesh animals with whose direct labor they dispense, or with the nervous and muscular vigor derived from consuming which, as food, they dispense? In thus taking the place of cattle, horses, mules, and machinery, do they impede their civilization by becoming, to a like extent, virtually cattle, horses, mules, and machinery?

Great Britain is commonly said to have a machine power equal to that of 1,000,000,000 human beings—or say, healthy Chinamen. If there were, in fact, half that number of people in China, but supplying all their own machine and labor power, would the fact cause the Chinese Empire, with 500,000,000 people, to possess only half the productive and fighting power of the British Kingdom, with less than one-tenth the Chinese population? Whether from this cause or not, this seems to be not far from the net result. Not only is the productive power, but apparently the military power, the inventive power, and the thinking power of a people increased in the ratio of its stock of machines and live-stock, as accurately as it would be if its cattle and engines were endowed with thinking powers. But all these appliances are to be considered not merely as producers, but as consumers of wealth. They add to the national force and to the aggregate earnings of the nation, but they are heavy consumers as well. The Chinese, by dispensing with them, lessen their national earnings, as indicated by rates of wages, possibly nine-tenths. But if they avoid a consumption of labor and wealth

equal to eight-tenths, they still lose only a fifth, in aggregate means of consumption, relatively to Western nations, and meanwhile they render possible a multiplication of human life corresponding, in some degree, to the Western multiplication of animals and machines, whose places they take. The United States maintained, in 1880, a population which, if reduced to labor power, and power of consumption, so as to measure it fairly against the Chinese, would assume something like this form :

Human population	51,500,000
Horses	10,357,488
Mules and asses	1,812,808
Working oxen	993,841
Milch cows	12,443,120
Other cattle	22,488,550
Sheep	35,192,074
Swine	47,681,700
Machines possessing a manual or man-power equal to	800,000,000
	982,469,581

Taking the unaided labor power of one human being as the unit of account, it would appear that, even if there were in China the 450,000,000 of people with which rumor credits China proper, still the aggregate labor power, productive power, earnings and fighting power, all of which become one power in the last analysis, which we may call power in exchange, or economic power, would be less than half that of the United States with its present 60,000,000 of people. The latter, through its possession of 930,000,000 units of labor power, not embodied in men, but in cattle sources of animal food, and machinery, would have, for division among its 60,000,000 people, the proceeds of the earnings of this extra 930,000,000 of units of labor power, from the profit of which, of course, would have to be first deducted the cost of maintaining all this subordinate labor power. This would bring, in the first instance, to each American, as wages, the earnings of sixteen units of labor power, or of sixteen men working, like Chinese, without machinery. If the machinery cost nothing to maintain, then rates of human wages ought to be sixteen times higher in America than in China, because it would be sixteen times more productive. But if, as we have seen in our chapters on profits and capital, the tendency of all the appliances we use in labor is toward working at the halves, with those who adopt

them, then the average cost of constructing and maintaining these aids to labor in America, in the form of machinery and animals, would be half their gross earnings. This would leave the average wage of labor in America eight times greater than in China, and this result corresponds closely to the fact. Meanwhile, however, the Chinese would have for division among their people in the form of food, clothing, and shelter for human beings, a fund equal to the expenditure we sustain in maintaining our domestic animals, and in building and maintaining our railways and machinery. These tend toward a cost identical with the average returns on capital actively in use in industry, which, as we have seen in the same chapters on profit and capital, are twice the average rates on loans:

The cattle and live stock of the United States are worth	$ 1,800,000,000
The railways and transportation machinery . .	7,000,000,000
The manufacturing machinery	3,000,000,000
	$11,800,000,000

The cost of maintaining which is 15 per cent. ($1,710,000.000) per annum, or enough at five cents per day each ($18 per year, which is the average Chinese cost of support) to maintain 94,000,000 of Chinese laborers in China.

While the machine and animal power of the United States would multiply the productive power of the American people by eight, relatively to that of any nation which, like the Chinese, should wholly dispense with them, we do not find that the annual cost of this animal and machine power in the United States —which would be saved in China by dispensing with it—would raise a fund adequate to the support of more than 94,000,000 of Chinese. While the absence of machine and animal power would reduce the average wage per man to one-eighth the American wage, it would only amount to a saving which would provide for 94,000,000 additional population, out of a total production equalling the American product. Very scanty data exist for comparign the aggregate value of Chinese consumption with American. Probably it does not exceed one-half, or perhaps two-thirds, in the total.* But assuming it to be equal to the American, the

* Adam Smith, writing a century ago, says of Chinese industry:

"China has been long one of the richest, that is, one of the most fertile, best cultivated, most industrious, and most populous countries in the world. It seems, however,

saving of cost in producing it, by dispensing with machinery and animals, would only provide subsistence for about 94,000,000 people, or say twice the population of the United States.

We may now, with interest, inquire what the sum total of the evidence shows to be the actual population of China. For if the vast population sometimes attributed to that country actually exists, it can not be conceded without admitting that the Chinese system of industry is something more even than a great success. It would amount to a success far exceeding that of our Western system in its ability to maintain numbers in comfort. This, too, could not be admitted without at least raising the inference that a condition of society which is without machines and animal labor might find a larger relative place for human labor. This, if true, would be an economic fact of the first importance.

England and Wales, of which five-sixths are cultivated, though aided in their labor by a machine power equal to the manual labor of the entire population of the globe, and including the me-

---

to have been long stationary. Marco Polo, who visited it more than five hundred years ago, describes its cultivation, industry, and populousness, almost in the same terms in which they are described by travelers in the present times. It had, perhaps, even long before his time, acquired that full complement of riches which the nature of its law and institutions permits it to acquire. The accounts of all travelers, inconsistent in many other respects, agree in the low wages of labor, and in the difficulty which a laborer finds in bringing up a family in China. If by digging the ground a whole day he can get what will purchase a small quantity of rice in the evening he is contented. The condition of artificers is, if possible, still worse. Instead of waiting indolently in their work-houses for the calls of their customers, as in Europe, they are continually running about the streets with the tools of their respective trades, offering their service-and, as it were, begging employment. The poverty of the lower ranks of people in China far surpasses that of the most beggarly nations in Europe. In the neighborhood of Canton many hundreds, it is commonly said many thousand families, have no habitation on the land, but live constantly in little fishing boats upon the rivers and canals. The subsistence which they find there is so scanty that they are eager to fish up the nastiest garbage thrown overboard from any European ship. Any carrion, the carcass of a dead dog or cat, for example, though half putrid and stinking, is as welcome to them as the most wholesome food to the people of other countries. Marriage is encouraged in China, not by the profitableness of children, but by the liberty of destroy, ing them. In all great towns several are every night exposed in the street, or drowned like puppies in the water. The performance of this horrid office is even said to be the avowed business by which some people earn their subsistence."

The notion that the Chinese are thus unclean as to animal food is rendered absurd by the fact that they are vegetarians by habit. The scavenger work referred to may have had reference to obtaining materials for the manufacture of glues and fertilizers, in which the Chinese carry their economies to a point not known among Western nations. It would be of great value to the harbor of New York if there were Chinese scavengers in boats, like those at Canton, ready to cleanse the harbor of materials which are now left to slush back into the sewers and send disease into the habitations even of the wealthy.

tropolis of the world, count only 389 persons to the square mile, while the sterile province of Shan-tung, only two-fifths of which are cultivated, counts 515. The "sterile and hilly" province of Kiang-se, cultivating only one-sixth of its land, counts a population of 421 to the square mile, or about 2,500 to each cultivated square mile, while France, cultivating 93 per cent. of all her land, attains only to 186 per square mile, or 208 per cultivated square mile. The province of Yun-yan, of whose lands only one forty-seventh part is cultivated, and which is "the Switzerland of China, very wild and jungly," claims a population of 51 to the square mile, or 2,400 to every cultivated square mile, while Illinois has a population of only 45 to the square mile, and 157 to the cultivated square mile. Foo-keen, only one-fifteenth of which is cultivated, and which is "very mountainous, but fertile where tillable," has a population of 236 to the square mile, while Connecticut, cultivating eight-fifteenths of her land, has only 113.15; Massachusetts, cultivating one-third, has only 186.84; New York, cultivating one-half, has only 93.25; and Rhode Island, cultivating two-sevenths, has only 166.43. In Wisconsin there are five acres of cultivated lands *per capita* to each person supported in the State, while in the very wild and jungly province of Kwei-choo, where only one acre in eighty-four is cultivated, there are ten living persons to every acre of cultivated land, making a cultivated acre in a Chinese province, where there are plenty of uncultivated acres to spare, support fifty times as many persons as in Wisconsin. To credit such statistics is needless.

Travelers through vast regions of the hill country of China, away from the rivers, describe them as being as destitute of population, of roads, of hovels, or of tilled lands, as Tartary. Owing to an utter lack of transportation, population is only possible along the rivers, and even there it presents no greater appearance of compactness than in Europe and America, save as a larger population live in boats. Let an American immigration penetrate into China, taking with it steam-roads, horned cattle, plows, reapers, horses, and mules, opening up the deserted plateaus to settlement, and it might be found that the Chinese empire could triple its present population before its unused portions would come into that fullness of cultivation which obtains in Belgium.

Those who have defended the extravagant reports of the population of China have, in one or two instances, obtained stories con-

cerning the average of cultivation which would fit the statistics of population. Thus Dr. Medhurst, in his work above quoted (1842), declares that "there exists a report, made to the Emperor Keen-Lung in 1745, of the amount of land then under cultivation; according to which it appears that, reckoning the land belonging to individuals, with that in possession of the Tartar standards, the military, the priests, and the literary class, there were at that time 595,598,221 English acres under cultivation, since which period a new estimate has given 640,579,381 English acres as the total extent of occupied land of China." The fact that Commissioner Martin five years afterward had never heard of such a report, but was furnished with elaborate figures showing only one-fourth as large an area of cultivated lands, compels distrust of Dr. Medhurst's alleged report to Keen-Lung. Estimating the population of China, at the same number per cultivated acre as are sustained in France, it would amount to 44,997,600. A cultivated acre will not sustain more than from two to three times as many persons in China as in France.

We find a race probably reaching an aggregate of from 120,000,000 to 150,000,000. Their lack of means of transportation prevents them from developing from two-thirds to three-fourths of the acreage of tillable land in their own country. Hence they are slowly dribbling into others. Here they come into conjunction with races which are in the midst of an epoch of evolution, in the matter of implements of transportation and of agriculture, such as the world has never before seen. What the age of Pericles was in the development of Greek art, or that of Justinian in the perfection of Roman jurisprudence, that is our own age in the matter of transportation and the handling of vast agricultural areas. The American people have in the greatest abundance what China most lacks—live-stock and agricultural and transportation machinery. China, so far as her home trade fails, has a surplus of what we most lack—docile, patient, temperate, skilful, obedient laborers, with muscles of steel and hearts of women. Yet the exchange of these needs is a delicate problem, to be conducted with tact and prudence on both sides. The Chinese government is not wholly unwise in fearing the disruption of industry, and the perils of starvation to millions of Chinamen, which would result from the sudden breaking up of their long-settled habits and channels of industry by any premature introduction of railroads, steamers, stationary machinery, and manufactures. These would underwork the Chinamen themselves, and turn them

out by millions to die of famine, or to be transported—as has been the fate of the Hindu populations under like causes. Among the leading mandarins and diplomats, who accompanied Burlingame's embassy to this country twenty years ago, the opinion was freely expressed, that when American machinery and agricultural implements could be introduced into China through the services of returned American Chinamen, fully educated in their use, so that race questions and international issues would not intervene to complicate the inevitable labor troubles, then they would not only be tolerated but welcomed by the Chinese nation. This is sound Chinese statesmanship. So far as it is possible for the people of one nation to have duties within the territory of another, a national duty devolves on Americans to see that it is not broken down in China, as its needed counterpart has been in India, by Christian bayonets and bullets !

The total of arrivals of Chinese in this country, during thirty years, have not exceeded 233,000 ; the official figures show 93,000 of these to have gone back again ; and, estimating deaths of twenty in every thousand per annum, only 105,000 were left, when that form of national exclusion which America united with England in denying the right of the Chinese government to adopt against the United States, was adopted by the United States against the Chinese. The total arrival was smaller than has often come from Europe within two months. Arrivals at the rate of 4,000 per annum became particularly terrible in the eyes of those very recent accessions to our growth, by a European immigration, which had freely come at the rate of 600,000 per year.

At present we send expeditions, innumerable, to explore the fields of shifting ice that girt the Polar Circle, where population is impossible, and commerce a forgotten dream, while we practice international iniquity, founded on economic ignorance, toward a people whose mere numbers we do not know, within a margin of four times the whole population of America or France. If we do not know within 200,000,000 its numbers,* how can we know its economics or politics? In ignorance of these, so far from Western nations being in a condition to assume control of the destinies of the Chinese Empire, they have failed to reach a stage in which it could be possible for them to judge wisely of their own interests relatively to this great people.

* In Behm and Wagner's Statistical Atlas for 1882 a reduction equal to the combined population of America and Italy is made in their estimate of Chinese population. —*Behm and Wagner,* "Die Bevolkerung der Erde," VII.

The policy of at least postponing, and hindering, the deportation of the Chinese to this country, is doubtless final, so far as legislation is concerned, but to render it effective, it is essential that the Chinese people shall be permitted to prosper in their industries at home. This they can not do, if any foreign nation, and especially any nation using machinery in manufactures against Chinese hand labor, is to be permitted to force the products of its steam-driven looms, its cottons, silks, and woolen cloths, upon the nation among whom cotton, silks, and the loom all had their origin. The Chinese will find homes elsewhere, if their manufactures shall be subjected to any such immolation as overwhelmed the weavers of India. In this regard, Burlingame and his embassy clearly saw that the economic interests of the Chinese nation and of England were at war, while those of the Chinese and of the United States are identical. Should Manchester looms destroy Chinese manufactures, America would, in spite of all statutes, be beset by the fleeing hosts of refugees from famine.

The Chinese Empire is a country of unique economies, yet of immense resources. We can not, if we would, fairly compute its relative loss and gain, by adhesion to manual against machine labor. A nation which can transport its immense products of tea and silk, of metals, grain, food, woods, cloths, and furniture on the backs of men, over vast ranges of mountains, using no other means of transportation, until it reaches its canals and rivers, and can do all this because it regards the cost of feeding beasts of burden as too expensive, is to us an anomaly.

But it must not be inferred to be an absurdity. The Chinese invest no labor in means of transportation by steam, whereby they save a cost relatively to the American people of, say, seven billions of dollars, or one-seventh of all the values now existing in our republic. They invest per capita probably not more than one-fifth as much labor as the American people in habitations—one-tenth as much in beasts of burden, draught animals, and in feeding animals kept for food, and perhaps a fourth as much in clothing, a twentieth in furniture, a tenth in improvements on land. This leaves them more time relatively for amusement, education and labor, devoted purely to providing themselves with food and raiment. Perhaps one-half of what Western nations expend time and effort in producing, Chinese labor exempts itself from the tax of producing by avoiding the use of it.

One of the ambassadors accompanying Burlingame to Amer-

ica was asked what he thought of the American industrial system, compared with that of the Chinese. "It is very fine for you," he replied, "because you like to expend vast labor on things which we would not care to work for. It would not do for us, for we do not care to work so hard. You have very big houses which you do not need—a great many animals which you have to feed at great cost—much machinery and carriages, carts, wagons, which you have to labor early and late to keep up, for they wear out fast. We don't like these things. We like our small houses better, We are less ambitious, but we work less, rest more and are more happy." *

Though the Chinaman's means of production are small, he saves the great fund of toil which we expend in producing means of production themselves, as distinguished from enjoyable commodities. All that the Chinaman does, though it may be done at a small wage and a slow rate, is expended directly in producing immediate means of sustenance.

Whether the population of China be the four or five hundred millions frequently assigned to it, or the two hundred millions assigned to it by the late Minister Seward, or the three hundred and fifty millions reckoned by Behm and Wagner, or the one hundred and twenty millions herein supposed, it is still a marvel of success in an industrial point of view. It maintains a higher standard of material comfort than exists in any other part of the world except in Western Europe and America, and a more equal diffusion of elementary education than exists anywhere except in the United States. The thousand years of deepening barbarism, which descended upon Europe during the Middle Ages, did not work its dark revulsion in China. The libidinous moral chaos, which Gibbon describes as attending the demoralization and downfall of Rome, left China still content with the homely Franklinism of Kong-fut-zi, the spiritism of La-ot-zi, and the altruism of Saky-a-mun-i, or the Buddha.

When the Crusades were desolating the pathway between the homes of the Christians and the birth-place of their religion, when the ensuing Inquisition and religious wars were throwing their lurid light over the career of faith in the West, China knew only a toleration so broad that the same person might indulge in the threefold faith of being a Confucian in his philosophy, a Taoist in his spiritualism, and a Buddhist in his creed.

* As significant of the more restful nature of the Chinese life, the last work on the Corea is entitled "The Land of the Morning Rest."

The retaliations which have been practiced, in exceptional instances, upon foreign religious houses have often, if not always, grown out of reasons which, rightly, or wrongly, brought them into supposed responsibility for confessed foreign interventions and aggressions of a peculiarly perfidous and cruel character. These are nearly or quite the only deduction to be made from a record singularly mild, humane, peaceable, and sensible, which the Chinese have pursued toward the surrounding world.

The Chinese system of economy, after all due allowance is made for it, is still wasteful of human labor relatively to one that involves a larger use of animal labor and machinery. Its saving at the spigot, like that of all inferior modes of work, is effected by a spilling at the bung.

It leaves large portions of the hill country of China untilled; indeed, if any reliance is to be placed on the statistics concerning areas of cultivation furnished by the Chinese mandarins, it dooms five-sixths of the area of China to waste. Certainly, if we could introduce American cattle, horses, and agricultural implements into those parts of China which are now excluded from cultivation by their distance from the great rivers and canals, a gradual but more effective revolution would take place in Chinese methods, than would be effected by the introduction of railroads and telegraphs. It is probable that it would be a like mistake to press the Chinese for the privilege of introducing railways before we had introduced beasts of burden, as was from the first made, in our treatment of our native savages, in trying to convert them directly from a savage and hunting race, into a civilized and agricultural one, without passing them through the natural intermediate stage of herdsmen and shepherds. The Chinese should have cattle, horses, and agricultural implements, for at least a century, before they could safely or wisely permit the building, by a superior race, in their midst, of railways and steam manufactories. Their transition, to be safe, must be gradual. It must also be largely the work of the Chinese themselves. Not until the Chinese that come to the United States, learn and practice something of our methods of farming, will they take back those methods to their own country. Not until they do take back these methods to China, can we begin to find, in China, that market which will be most beneficial to both countries—viz., for our live stock, agricultural implements, and machinery. The first requisite to a freer and friendlier intercourse with China is that we should take pains to learn more of it.

A low estimate of Chinese honesty is common among Western nations, yet it is a curious fact that when the latter obtained their silk fabrics direct from China, a silk dress when made would stand without support, and wear from ten to thirty years; indeed, would descend to daughters as an heirloom. Now that Western integrity has had a chance to expend its exacting energy on the manufacture of silks, the article commonly sold will wear but a few weeks without destruction, and silks embodying the ancient qualities, of durability and purity, are not obtainable. Indeed, a public taste has set in which requires that silks should be relatively worthless. If any were now put on the market containing the earlier characteristics, they would meet with no sale.

They were also the originators of porcelain ware, and of certain varieties of cotton cloth, in whose manufacture they are without superiors, except as machinery is superior to manual power. The interior silk, porcelain, cotton goods, paper and tea trades of China, are so much more important and valuable than their export or import in any of these lines, that if the latter were entirely obliterated or prohibited, prices and supply would hardly be affected. The Chinese are so eminent, as manufacturers, that they need no foreign trade whatever, and such trade is in no material sense a boon to them. Along with this complete versatility in manufactures, there has been a total exemption from famines and destitution, except as local emergencies are created by an overflow of rivers or like calamity, which it is a chief function of the imperial government to provide against and alleviate.*

---

* Mitchell, "Accompaniment to Map of the World," etc., who places the population of China at 200,000,000, says: "A general good-humor and courtesy reign in their aspect and proceedings. Flagrant crimes, and open violations of the laws, are by no means common. The attachments of kindred are encouraged and cherished with peculiar force, particularly towards parents and ancestry in general. The support of the aged and infirm is inculcated as a sacred duty, which appears to be very strictly fulfilled. It is surely a phenomenon in national economy very worthy of notice, that, in a nation so immensely multiplied, and so straitened for food, there should not be such a thing as either begging or pauperism. The wants of the most destitute are relieved within the circle of their family and kindred. It is said to be customary, that a whole family, for several generations, with all its members, married and unmarried, live under one roof, and with only two apartments, one for sleeping, and the other for eating; a system, the possibility of maintaining which implies a great degree of tranquillity and harmony of temper. Within the domestic circle, however, and that of ceremonious social intercourse, seems to terminate all that is amiable in the Chinese disposition. In every other respect they show no interest in the welfare of their fellow-creatures, nor even the common feelings of sympathy. Repeated instances have occurred of Chinese dropping into the sea, and being rescued by the English, while their own countrymen did not take the least notice, or make a single effort to save them. Their propensity to fraud has been amply noticed by travelers, but appears to have

The state of partial subjugation of China and Japan, by the European powers and the United States, in 1854 to 1858, was one of the results of the strong tide of opinion in favor of coercive or forcible free trade, which culminated in the repeal of the Corn Laws in 1846 and the passage of the Robert J. Walker tariff, in the United States, in the same year. The platform of the democratic party in the United States, at this period, declared it to be one of the duties of enlightened nations to pursue an aggressive policy, in forcing free trade on nations not disposed to adopt it. The gentlemen in America, who were most determined in this policy, were the same who were also determined to force slave labor on communities whose defective economic education did not enable them to perceive its advantages. Mr. Townsend Harris, pursuant to this policy, began his residence in Japan, in 1856, with the fixed purpose of wheedling that country if possible, but forcing it if necessary, into adopting a tariff which was a copy in its essential structure of the Walker tariff of 1846, except that in the free-trade point of view it was more enlightened, since the duties were lower. The additional enlightenment necessary to make the duties lower was communicated, first, by an imposing and intimidating visit from Commodore Perry with an American fleet, supplemented in 1858 by the appearance of a combined English and French naval force. The treaty thus obtained was intended, by Mr. Harris, to provide for a duty of five per cent. only on effects required for the immediate use of alien residents, while goods intended for sale should pay 20 per cent., intoxicating liquors 35 per cent., and opium should be prohibited. There was also a five per cent. duty on exports.* But Lord Elgin, in negotiating the English treaty immediately afterward, caused cotton and woolen stuffs for sale to be added to the five per cent. list. In 1862 they were cajoled into abolishing the 35 per cent. duty on wines and spirits, and in 1864 they strove to avert an armed invasion by transferring a large number of Western manufactures from the classification of 20 per cent. to that of five per cent." Switzerland, in the same year, "when the European fleets were gathering for the assault, obtained a treaty which formally authorized the admission of almost every conceivable ware at the lowest rate." Under the "most favored nation" clause, this enured to the equal advantage of all the other

been somewhat exaggerated. To the Hong merchants belongs the merit of having established a character of very strict honesty; and many even of what are called 'outside merchants' appear to be highly respectable."

* For particulars of the course of Western powers toward Japan, see E. H. House on "The Martyrdom of an Empire," in *Atlantic Monthly*, and on "The Tariff in Japan," *New Princeton Review*, January, 1888.

nations. The greatest hardship of these treaties is that, by a construction which would not for a moment be entertained between western nations, they have now for twenty years been held irrevocable. Western armed greed has denied to both nations an inherent part of their sovereignty. Thus we see "free trade" transformed into that phase of international piracy, which first forces revenue laws upon semi-civilized nations, which are destructive both of their revenues and of their manufactures, and then holds at the cannon's mouth that these laws are irrevocable, solely because they are infamously injurious to the people over whom they are imposed.

At present, while the public expenditure is $80,000,000, and a tariff framed for revenue only would produce $15,000,000, and one for protection $30,000,000, the tariff for subjugation, imposed on Japan by European guns, produces only $2,500,000 a year. Even with these low rates of duty, British officials openly threaten the Japanese with cannonading, if they attempt to suppress smuggling. Thus, while in protective countries free traders object to protective laws, on the ground that they encourage smuggling, when, as in Japan and China, the duties are reduced virtually to 3 per cent. they flourish their fists under the nose of the officials and say: "Stop our smuggling if you dare." In 1870 an imposing and dignified embassy of Japanese notables visited Europe and America to urge the restoration of their clear national rights. Their request was as firmly ignored as if orientals had no rights which occidentals could be bound to respect. The taxes of Japan are collected almost wholly from land. Mr. House, long and amply familiar with the country from thirteen years of residence in it, says: "The civil war, which swept over the country in 1868, was infinitely less devastating in its effects upon the solid prosperity of the people, than the disruption caused by the commercial invasion of the few preceding years. Intercourse with strangers had largely augmented the national expenditures, and at the same time had drained the sources of supply. The cultivators of cotton, sugar, and other staples, which had been partially extinguished by excessive importation, were incapable of meeting the demands upon them. In several provinces the levy could not be collected by any process. Attempts to enforce it provoked revolts. . . . The gradual growth of external commerce wrought nothing but injury, for the indulgence in foreign novelties cost the country many millions of treasure, which were never reimbursed by an equivalent influx from abroad."

CHAPTER XIV.

THE FREE TRADE CRITICISM.

197. Methods of Argument Concerning Protection and So-called "Free Trade."—There has been great repugnance, impatience and supercilious contemptuousness, on the part of a class of theorists, to the doctrine and practice of protection to industry, by tariffs, bounties, and navigation laws. This is the more singular, as such protection as a practice constituted, for 440 years, a leading feature in the policy of Great Britain,* is still prominent in her laws and policy, though veiled in some of its outward aspects, and pervades more or less the policies of all other nations except Turkey, India, and (by force) China and Japan.

The Marquis of Salisbury recently remarked in debate: "The whole civilized world rejects free trade." Protective theories have the qualified endorsement of Adam Smith† and John Stuart

---

* A working-man, P.C.Carroll, of Louisville, Ky., writes to the *Bulletin* of the American Iron and Steel Association the following well-condensed summary of English protective legislation prior to 1846:

"Knight's History of England, on page 123, vol. 2, tells us that in the third year of Henry IV. England levied a prohibitory tariff on the importation of laces, ribbons, fringes, twined silk, embroidered silk, bodkins, scissors, pins, knives, daggers, razors, andirons, gridirons, hammers, pincers, fire-tongs, ladles, dripping-pans, candlesticks, playing cards, and dice. This act graced the statute books of England from 1402 to 1842. Lord Stanhope is not a very bad authority on 'English laws.' This is what he says, in the 34th volume of the English Parliamentary Debates, page 178: 'We have now 977 acts of Parliament protecting our woolen industries; 964 acts protecting the fisheries; 460 acts protecting our tobacco manufacturers; 283 acts protecting our currency; and 440 acts regulating the wages of labor.' His lordship says that 194 of those acts were entirely prohibitory. John Wade ('Black Book, or Corruption Unmasked,' tells us that, within his own recollection, the English Parliament passed 200 acts protecting the manufacture of alcoholic liquors; 54 acts protecting her cotton manufactures, and 22 acts protecting iron, steel, lead, copper, tin, etc., were scattered over and nearly filled 1,000 volumes of Parliamentary Reports."

† Adam Smith in book iv., chapter ii., page 203, of the "Wealth of Nations," says:

"Though there seem, however, to be two cases in which it will generally be advantageous to lay some burden upon foreign for the encouragement of domestic industry:

"The first is when some particular sort of industry is necessary for the defence of the country.

"The second case is when some tax is imposed at home upon the produce of domestic industry.

Mill,* even while they call forth the petulance of both, and provoke the ill temper of Mill. Jevons, Cairnes, Bonamy Price, Fawcett, and Thorold Rogers all lose their good manners on no

---

"So there are two others in which it may sometimes be matter of deliberation:

"1. When some foreign nation restrains, by high duties or prohibitions, the importation of some of our manufactures into their country.

"2. When particular manufactures, by means of high duties or prohibitions upon all foreign goods which can come into competition with them, have been so far extended as to employ a great number of hands. Were those high duties and prohibitions taken away all at once, cheaper foreign goods of the same kind might be poured so fast into the home market, as to deprive all at once many thousands of our people of their ordinary employment and means of subsistence."

The looseness of Dr. Smith's specification will appear when we consider that each of the classes he specifies includes nearly every thing. Woolen goods and therefore sheep, leather and shoes and therefore cattle and tanneries, food in independent supply, medicines, ships, printing facilities, railways, telegraphs, iron and steel roads, bridges, all are important as elements in national defence. As to the second case, taxes are always imposed at home on the products of domestic industry. The general burden of domestic taxation has to be borne by its domestic labor (except in so far as it may, through certain forms of taxes on imports or exports, collect a revenue from foreign producers of our imports, or consumers of the exports of those countries which tax exports). It all rests, therefore, with these exceptions, on domestic products. The third specification is also, universal, since at all times foreign nations restrain, by high duties on importations, certain imports from our country into theirs. England restrains by a 500 per cent. duty the import of leaf tobacco from the United States, and prohibits, essentially, our manufactured tobacco. Hence, under this third specification, we are to at least deliberate whether we should not protect our woolen manufacture against the English.

In his fourth specification, Dr. Smith does not point out the chief evil result of prematurely removing a productive duty, viz., that it may prevent that expansion of the dimensions of the domestic industry, which is found by experience to be often, and always if the country has the proper natural resources, the shortest road to cheapness.

* John Stuart Mill, volume ii., page 538, comes very near giving an adequate statement of one of the good effects of protection; he says:

"The only case in which, on mere principles of political economy, protecting duties can be defensible, is when they are imposed temporarily (especially in a young and rising nation) in hopes of naturalizing a foreign industry, in itself perfectly suitable to the circumstances of the country. The superiority of one country over another, in a branch of production, often arises only from having begun it sooner. There may be no inherent advantage on one part, or disadvantage on the other, but only a present superiority of acquired skill and experience. A country which has skill and experience yet to acquire, may in other respects be better adapted to the production than those which were earlier in the field; and besides, it is a just remark of Mr. Rae that nothing has a greater tendency to promote improvements, in any branch of production, than its trial under a new set of conditions. But it cannot be expected that individuals should, at their own risk, or, rather, to their certain loss, introduce a new manufacture and bear the burden of carrying it on, until the producers have been educated up to the level of those with whom the processes are traditional. A protecting duty, continued for a reasonable time, will sometimes be the least inconvenient mode in which a nation can tax itself for the support of such an experiment. But the protection should be confined to cases, in which there is good ground of assurance that the industry which it fosters will, after a time, be able to dispense with it; nor should the domestic producers ever be allowed to expect that it will be continued to

other issue but this, and,* singularly enough, their lack of all patience in investigation, candor in analysis, and even honesty of statement, seems proportionate to the fervor of their anger. Of late Henry Sidgwick of Cambridge, C. S. Devas in his "Ground-

---

them beyond the time necessary for a fair trial of what they are capable of accomplishing."

Again discussing the English navigation laws, he thus justifies their enactment and places the absence of their further need on the protective ground that English ships and sailors can now navigate as cheaply as those of any other country. He says:

"When the English navigation laws were enacted, the Dutch, from their maritime skill and their low rate of profit at home, were able to carry for other nations, England included, *at cheaper rates than those nations could carry for themselves*, which placed all other countries at a great disadvantage in obtaining experienced seamen for their ships of war. The navigation laws, by which this deficiency was remedied, and at the same time a blow struck against the maritime power of a nation with which England was then frequently engaged in hostilities, were probably, though economically disadvantageous, politically expedient. But English ships and sailors can now navigate as cheaply as those of any other country, maintaining at least an equal competition with the other maritime nations, even in their own trade. *The ends which may once have justified navigation laws require them* no longer, and afford no reason for maintaining this invidious exception to the general rule of free trade."

*As specimens of perfervid temper, not backed by the least pretence of basis or justification, we cite the following, which indicate that if arrogance and effrontery can successfully continue to bulldoze the British minority, there will never be any dissent in England from views in which, as the Marquis of Salisbury says, the whole civilized world is against the English.

Thorold Rogers ("Six Centuries of Work and Wages in England," p. 522) says: "From sheer folly or from interested motives, a belief that better profits would ensue to employers, or in order to serve party ends by giving a false interpretation of economical phenomena, there are persons who are foolish or wicked enough to advocate the return to a protective policy in England under the name of fair trade. . . . Such shameless mendicancy is in keeping with the conditions of aristocratic government, which has, in the history of English finance and legislation, put the burdens of state on the many and freed the property of the few, but when it is fully understood, it will not serve the men who advocate it, or the party (Tory) which has the meanness to encourage it."

Bonamy Price ("Practical Political Economy" p. 300) says: "We are again summoned not by the brilliant fallacies of some clear thinker, but by the renewed vigor and progress of protection in the practical world (p. 299—in Germany, in France, in the United States, in Canada, in most of the British colonies, countries full of men of high intelligence and ability)—to reargue the first principles of free trade. . . . Protection seems to be indestructible—a weed that no intellectual or social culture can root up—a principle that is part of human nature itself."

On p. 315 Price says: "No name of high celebrity is put forward so incessantly, as the shield of their doctrine, by the advocates of protection, as that of Mr. Mill, and so great is the support which it gives to a policy so profoundly injurious to the happiness of mankind, that it may almost be questioned whether Mr. Mill has not done more harm to the welfare of the human race by the countenance he has given, though limited, to protection, than he has done good by all his other writing on political economy."

Price says that "free trade is the one subject in political economy which is susceptible of complete demonstration." Yet in his 40-page chapter he substitutes assumption for proof, and begs the whole question, getting out of the supposed argument without stating a single economic fact with definiteness enough to suggest a conclusion.

Prof. A. L. Perry says: "There is nothing original and nothing American and noth-

work of Economics," R. S. Moffat in his "Economy of Consumption" have followed in the wake of Judge Byles, Sir Edward Sullivan and the few others who have kept up the battle for the protective policy on English soil. Lord Beaconsfield, in his life of Lord George Bentinck, indicates his own protectionist convictions, and there is no reason to believe he ever departed from this conviction.

The besetting sin of the free-trade school of writers is, that they advance the puerilities of children, with the pompousness of kings, and the unscrupulousness of rogues, and then say this is demonstration, when no intelligent mind sees in it the quality of conclusiveness, and often it lacks all semblance of knowledge, or candor, or economic expertness in thinking. For instance, Bonamy Price, in 1875, writes ("Practical Pol. Econ.," p. 314), "In what state would now be the colossal manufactures of England if the duties on foreign corn had kept bread dear over the whole land?" We infer, therefore, that Bonamy Price believes that the repeal of the corn laws in 1846 caused a large permanent reduction in the prices of bread-stuffs. On the contrary, turning to the Encyclopædia Britannica (Corn Trade), we find that in the seven years ending Christmas, 1846, the prices per imperial bushel were:

Wheat.	Barley.	Oats.	Total.
7*s.* 0½*d.*	4*s.*	2*s.* 8½*d.*	13*s.* 9*d.*

The average gazette prices per imperial bushel in the seven years ending 1875 were:

Wheat.	Barley.	Oats.	Total.
6*s.* 6¾*d.*	4*s.* 10*d.*	3*s.* 2½*d.*	14*s.* 7½*d.*

Here are two free-trade authorities, the professor and the "Encyclopædia," the professor boldly assuming that the repeal of the corn laws made bread cheap, and therefore built up the colossal manufactures of England, and the "Encyclopædia" trying to prove that the withdrawal of protection from the farmers benefited them, for breadstuffs sold higher under free trade than ever! The "Encyclopædia" states the prices correctly, and they

---

ing continental in the petty and piddling and devilish devices of our protection system." (19th ed. p. 508.)

Jevons says: "Protectionists overlook the fact (1) that the object of industry is to make goods abundant and cheap; (2) that it is impossible to import cheap foreign goods without exporting home-made goods of some sort to pay for them."

It is difficult to conceive how a sane man could utter these words of Jevons without shame.

show that bread was not permanently cheapened. So that which the Oxford professor offers, as a demonstration, turns out to be a falsehood.

Again Bonamy Price says (p. 320) at the repeal of the corn laws "the whole agricultural hierarchy" (with what candor can a minority, that is outvoted on a question, be called a "hierarchy," especially when it consists of several millions of farmers?) "landlord, farmer, and laborer, believed that the wheat lands of England would go out of cultivation." This was not the exact charge, so much as that the wheat lands of Ireland and Scotland would go out of cultivation. But now we look to see Price show that the wheat lands, even of England, did not go out of cultivation. Does he do so? Not at all. He says: "Parliament was not deterred by this alarm; it persevered with the abolition of the duties on foreign corn. And what has been the final issue? An improvement in the efficiency and productiveness of agricultural labor unparalleled in the kingdom, a growth of wheat per acre unknown to former ages, a rise of rent for the landlord, and better wages for the laborer!"

Suppose all this were true, does it refute the prophecy that wheat lands would go out of cultivation? It has no bearing on it. It does not appear that the landlord, farmer, and laborer predicted that hogs, cattle, or poultry could not be raised at a profit, or that farming of all kinds would be destroyed. They only predicted that wheat lands in England would go out of cultivation, *i.e.*, that enough English wheat would cease to be cultivated, and would give place to foreign grown wheat, to leave the aggregate supply the same and the average price the same. This was a significant prophecy, for, if true, it exploded the whole free trade argument at two points, viz., at the point where it claimed that free trade would cheapen bread, and at the point where it claimed that it would not send wheat out of cultivation. This prophecy Price seeks to explode as false. How? Shades of the logicians! By proving that the English went to raising hogs and cows. Meanwhile the Encyclopædia Britannica concedes that between 1852 and 1867 there was a net decline in cultivation, to all crops, over all gains, in the fifteen years, of 447,000 acres in England, and a net decline in tillage of wheat, oats, beans, peas, and bare fallow of 1,297,000 acres in England alone, while in Scotland and Ireland "the decline was more marked, the production in wheat falling off one-half." And yet an economic teacher, who thus does not even juggle with his facts, but openly mis-states them.

not only asks us to regard his unscrupulous errors as conclusive demonstration, but proceeds to dignify us as "weeds" if we suggest that he is not even bright.

Turning to Mr. Jevons, we would be justified in expecting, from the value of his arguments on other questions, that he would handle this one in a manner that would do him credit. Instead of this we find him shutting his eyes to the pith of the protection argument, and in order that it may be possible for him to refute it, he states it in a manner to drop its entire bottom out in the statement. Protectionists do not claim that buying a commodity abroad does not imply the employment of any home labor whatever. They know and admit that it implies the employment, in this country, of the labor and capital which produce whatever domestic product is given in exchange for the imported articles. What they claim is, that the making of the article sought, in this country, employs, as compared with its importation from abroad, two domestic capitals, and two sets of domestic laborers, instead of only one,—viz., that the making it here employs both the capital and labor which produce the article (corn, for instance) which is given in exchange for the thing sought (cloth or iron), and also the capital and labor which produce the cloth and iron themselves, whereas the importing it from abroad gives employment to only one domestic capital and set of laborers, while the capital and labor employed in producing the imported iron or cloth are a foreign capital and foreign set of laborers. This point was stated clearly by Adam Smith, in defining the greater profit of home over foreign trade. Side by side with this, is the claim that the production at home, as compared with the importation, involves two domestic consumptions of products instead of one, viz., the domestic consumption of the corn, and of the cloth or iron for which it is exchanged, while the importation of the cloth or iron involves a domestic consumption only of the cloth or iron, and a foreign consumption of the corn. Hence domestic production, as compared with importation of foreign goods, involves a doubled consumption and a doubled production.

Instead of meeting this point, Mr. Jevons acts as if he thought he had met it, in the following statement: *

"But, it may be objected, what is to become of workmen at home, if all our supplies be got from another country? The reply is that such a state of things could not exist. Foreigners would never think of sending us goods, unless we paid for them in goods,

* "Primer of Pol. Econ.," p. 132.

or in money. Now if we paid in goods, workmen will, of course, be needed to make those goods, and the more we buy from abroad the more we shall need of home produce to send in exchange. Thus the purchase of foreign goods encourages home manufactures in the best possible way, because it encourages just those branches of industry for which the country is most suited, and by which wealth is most abundantly created."

Here the point that domestic production employs two capitals and sets of laborers, while importation from abroad employs only one, is met by saying, "No, you are mistaken, for I have clearly pointed out to you, that importation does employ one domestic capital and set of laborers." And then protectionists are gravely told that their views are persistent weeds, which no intellectual culture can overcome !

198. Sidgwick on Protection to Native Industry.—Nearly all the writings of English economists treat the protection question in a manner which is slovenly, when brought into contrast with the elaborate thoroughness, and economic acuteness, with which it has been treated in America by practical statesmen, and by a somewhat numerous class of writers. Of late, however, a school of writers is arising which promises more fairness. Prof. Henry Sidgwick of Cambridge * holds that from the point of view of abstract theory, protection may, under certain probable circumstances, "yield a direct economic gain to the protecting country, but that it is difficult to secure in any government sufficient wisdom, strength, and singleness of aim to introduce protection, only so far as it is advantageous to the community, and withdraw it inexorably, so soon as the public interests require its withdrawal." Hence, he thinks it practically best "to adhere to the broad and simple rule of taxation for revenue only."

This statement seems to us like the distant speculations of a closet-thinker, who means to be just but has had no opportunity for close or minute observation of the operations of a protective system of duties in detail. It does not require "wisdom, strength, or singleness of aim" to "introduce protection only so far as it is advantageous to the community." Protection introduces itself, and only so far as it is advantageous to the community, by the simple act of attempting to lay a duty for revenue only, on any foreign product which the taxing country has all the natural resources to produce, but which for lack of some purely artificial facility, such as that the price shall be equal to its present cost of

* The Principles of Pol. Econ., p. 485.

production, or such as low-priced labor or capital, or raw materials, or implements or machinery, it has not yet begun to produce. So naturally does protection introduce itself from the passage of a tariff for revenue only, that when England imposes a duty of 3*s.* 6*d.* sterling (87*c.*) per pound on the importation of leaf tobacco, she is obliged to prevent protection from introducing itself, by enacting that leaf tobacco shall nowhere be cultivated in the United Kingdom. For, if she did not make it criminal to cultivate the leaf, Irish and Scotch farms would immediately be covered with tobacco, the price of which would soon fall under domestic competition to the cost of production, say 3*d.* per pound, and from the time the price fell below 3*s.* 9*d.* per pound, the duty, now maintained as a revenue duty by prohibiting the production, would act as a protective duty prohibiting the importation.

English economists assume that the government needs no "wisdom, strength, or singleness of aim" to enable it to forbid the production of a crop, whose production, if permitted, might bring prosperity to millions of people who sadly need prosperity. But in the view of an American, a government requires far more wisdom, strength, and singleness of aim to justify it in prohibiting a domestic industry than in prohibiting an importation. Indeed, the American government is in one sense compelled to be protective, since in order not to be protective it would have to possess the power, which England exercises in the case of tobacco, to prohibit a domestic industry. Else the duty it lays for "revenue only" would immediately cease to produce "revenue only," and would begin to produce protection to the domestic protected crop. But the government of the United States would search in vain, in the Federal Constitution, for any clause empowering it to prohibit any domestic production, for any purpose. It has never tried it, and the thought of it is peremptorily inadmissible, and, from our American standpoint, despotic, wasteful, cruel, and barbarous. Since, without the power to suppress the domestic production, we could not prevent the duty on the importation from acting with a protective effect, Prof. Sidgwick will see that, so far from its being true that a tariff for revenue only is either a broad or simple rule of taxation, it is in the United States, an absolutely unattainable system, unless we could by constitutional amendment clothe the Federal government with a new power, the exact reverse of the power it was chiefly created to manifest, viz., a power to prohibit and destroy domestic indus-

tries, to prevent their product interfering with government revenue from imports.

Professor Sidgwick seems further to overlook the fact that if a duty on an import does not render it "advantageous to a community" to produce a commodity, that community will not produce it, and the duty will remain a purely revenue duty. Such were the American duties on tea and coffee prior to their repeal in or about 1870. The fact that the duty begins to operate protectively is indicated by the fact that it begins to be "advantageous to the community," or to some of its members, to produce the commodity. No injury to government revenues sets in, until there begins to be a benefit to the community, in the introduction of a new industry. It really needs no argument to prove that a new avenue of industry, source of profit, or means of occupation, to a considerable number of people, must be of more importance to a government itself, than the drying up of one of its sources of revenue, from importations. For the entire revenues of government are very small, compared with the revenues of the whole people, seldom exceeding one-twentieth, and when a new industry is set on foot, affecting the revenues of the people at large, the chances are about twenty to one that its importance to them will exceed in value its importance to their agency for certain limited purposes, the government. Indeed, viewing the government as an agent, and the people as their principal, it is a species of breach of trust for the agent to sacrifice the principal's revenues to his own, as England does in suppressing the cultivation of tobacco in the United Kingdom. It is a misnomer to style it a duty "for revenue only," when it is a duty "for revenue" and also for "the suppression of a domestic industry." Hence, the fact that it becomes advantageous to a part of the people to produce a commodity is to be assumed, or at least will be assumed, in all democratic countries, to be of more importance than any loss the government revenues may sustain by its production; for the government is a mere agency, and on a question of relative production should prefer the interests of the people to its own.

But the chief obscurity in Prof. Sidgwick's passage lies in the fact that he does not seem to have observed that when a protective duty, once wisely laid, is working protectively, there can be no public interest that can require its withdrawal, so far as its effect upon prices is concerned. For its function is to create a domestic competition in the production, which, beginning when the price of the domestic article is equal to the foreign price plus the

duty, will continue to reduce the domestic price until it comes down to the level of the foreign price, and becomes an article of export from the country imposing the duty, to the countries from which it formerly imported. This is exactly the series of stages through which France has gone in the production of porcelain, raw silk, and silk goods, cottons, woolens, and sugar, through which England advanced by means of her protective duties on woolen goods, iron and steel manufactures, coal, cottons, carpets, silks, etc., and through which America has advanced in farming implements, heavy machinery, fire-arms, fire-engines, carpets, cottons, musical, mechanical and mathematical instruments, raw cotton, etc. When the protective duty has brought the domestic price, by competition among domestic producers, down to the foreign, it is absurd to say that any public interests require its withdrawal, because the statute imposing the duty no longer affects prices, which are exactly what they would be if the statute were repealed. Until the duty has brought the domestic price down to a level with the foreign, it is absurd to say that any public interest requires its withdrawal, unless we also say that no public interest ever required it to be imposed, which we can not say so long as it is creating a domestic competition adequate to bring the domestic price down to a level with the foreign. But to say this is to say that it has not worked protectively at all, and has not stimulated the domestic production. And to say this in turn is to say that it has been a duty for revenue only, and has not raised the price of any thing which any domestic producer had the facilities to produce. Hence, the plea that a public exigency demands the repeal of a duty involves one or the other of two corollaries—either that the person making the plea does not believe in a protective duty at all, or that the duty in question has not been a protective duty in its action. For every truly protective duty repeals its own effect as a tax, when it runs its full course, and never needs repeal by a legislature for any economic reason.

Prof. Sidgwick says that "the question a statesman is usually called on to consider is whether a merely temporary protection is in the interest of a particular nation; and to affirm sweepingly, that this is opposed to sound economic doctrine, appears to me a simple and palpable blunder."* "Such protection, of course,† so long as it continues necessary, imposes an extra tax on the consumers of the article protected.‡. But there are conceivable

* "Principles," etc., p. 486. † Ib., p. 413.

‡ This partial error is corrected subsequently.

cases in which the loss to a country, thus caused, might be compensated by the ultimate economic gain accruing from the domestic production of a commodity now imported, while yet the initial outlay, required to establish the industry without the protection, would not be likely to be compensated to the private capitalists that undertook it. This would be the case, if the need of the outlay were of such a kind that, when once adequately met by the original *entrepreneur*, it would no longer exist for others, or would exist in a much less degree, since (in that case) almost as soon as the industry began to be profitable, competition would tend to reduce profits again, bringing prices to a point at which they would be remunerative to the later comers, but not to the introducer of the industry who had borne the initial sacrifices."

Professor Sidgwick then proceeds to argue that, on purely economic grounds, there would be a direct gain if the manufacture of iron in Michigan could be protected by duties against the free importation of iron from Pennsylvania. He then (p. 491) proceeds to consider "how far a share of the loss, involved in protection, can be thrown on the foreign producers on whose products the protective duty falls. It is obvious that this result will be *prima facie* attained, so far as the reduction in the demand for the taxed foreign products tends to lower their price, and causes them to be sold, in the protecting country, at a rate less than their previous price plus the import duty. Free traders are, of course, right in pointing out that, so far as this is the actual effect of import duties, such duties do not also fulfil their supposed primary end of protecting native industry,* since to whatever extent the foreign products are still purchased, to that extent the native products are not encouraged.

"But this in no way proves the inexpediency of the duties in question, since they may very well give adequate encouragement to native industry without completely excluding foreign products; and it can not be an objection to them from a purely national point of view, that a part of their effect is merely to levy a tribute on foreigners for the national exchequer. A simple case will show, a duty may at once protect the native manufacturer adequately, and recoup the country for the expense of protecting him. Suppose that a five per cent. duty is imposed on

* Practically the same duty may give revenue in part and protection in part, revenue on the portion of goods it admits, protection from the excess, which would be admitted were there no duty at all, over the quantity actually admitted under the duty.

foreign silks, and that in consequence, after a certain interval, half the silks consumed are the product of native industry, and that the price of the whole has risen two and a half per cent. It is obvious that under these circumstances the other half which comes from abroad yields the state five per cent., while the tax levied from the consumers on the whole is only two and a half per cent.; so that the nation in the aggregate is at this time losing nothing by protecting, except the cost of collecting the tax, while a loss equivalent to the whole tax falls on the foreign producers."

Professor Sidgwick, therefore, holds that protective duties, when not high enough to completely exclude the product protected against, "will partly have the effect of levying a tribute on foreign producers, the amount and duration of which may in certain cases be considerable." This power should be exercised with caution lest it lead to like protective duties on the part of other countries.* Still, in a guarded way, Prof. Sidgwick also argues that a country, by protecting its industries, may maintain a higher standard of wages than its competitor under free trade would maintain, and in this way the former may draw away a part of the population and wealth-producing power of the free-trade competitor.

199. Moffat on Protection in Growing Countries.—Mr. Robert Scott Moffat, in an elaborate work entitled "The Economy of Consumption," says (p. 345): "The population of countries which have a redundant supply of food is naturally a growing one,† and, where there are no artificial obstacles, its growth is usually rapid. The spare supplies of such communities are constantly encroached on, and absorbed, by home wants. But this natural absorption is hastened by the conditions arising out of the commercial relations of these countries with the countries which they supply with food. This commerce gives them the initial advantage of enabling them, by supplying their other wants, to turn their whole industry in the one direction, and thus secures a rapid expansion of the agricultural basis of indus-

* Obviously only a benefit to mankind, and to both countries, would ensue if it did.

† This statement illustrates the risk of even plausible *a priori* assumptions in economics. Ireland, Egypt, Persia, and India, all have redundant supplies of food even in the years when their famines have swept off the people most remorselessly. Ireland especially exported large quantities of food to England in the years of the Irish famine, producing far more than would have sufficed for the consumption of her people, but it was drained away to pay for manufactured goods which idle Irish capital, and idle Irish labor, should have produced.

trial organization.* Commerce, moreover, gives them the nucleus of towns, combining with an incipient organization of industry a training in the spirit of enterprise and speculation. It is impossible that a free country can rest in this position. Apart from industrial advantages, there are social and political motives which prompt it to aim at, and strive for, a complete organization of its home industry. From an industrial point of view there are also many advantages in the possession of a fully organized industrial system, and the immediate command of every variety of industrial skill, which are not to be measured by the mere price paid for commodities.

"There are also various reasons, already hinted at, in the commercial relations of these countries with the manufacturing ones, to quicken their zeal on behalf of a home organization of industry. There are the fluctuations of a commerce which, in addition to the uncertainties produced by its own uncontrollable complexity and world-embracing magnitude, resulting in periodical disorganizations and prostrations of industry, is liable to similar disturbances from political causes throughout the whole of its wide area. The immediate gain of taking foreign products is frequently also more apparent than real. Cosmopolitan manufactures are always the most doubtful in point of quality,† and initial cheapness is not always confirmed by the test of use. Countries in this position are thus naturally inclined to favor the protection of native industry, and this is the exception to the natural progress of industry towards liberty.

"This tendency towards protection is, as I have said, natural, and it is fully justified by the strictest economic reasoning. The fanatical intolerance, with which it is often assailed in this country, is the result simply of ignorance, and the prejudices bred by self-interest.

"The aim of the policy is manifestly a legitimate one. It has already been shown that a home organization of industry is, in the strictest sense, the most economical; and there can be no doubt that, when a new country has raised its manufactures to an equality in efficiency with those of older countries, it will

* On the contrary, the more manufacturers come into a country, producing a surplus of food, the more food the farmers can produce.

† Many of the cottons made in England for barbarian customers are so "sized" and otherwise adulterated that they lose one-fifth their weight in being washed once. According to Chambers' Encyclopedia shoddy enters largely into the best British woolen manufactures.

gain greatly by exchanging its agricultural products against its own manufactures, instead of sending them abroad. The whole question, then, is one of method; and the arguments, which those who call themselves free traders direct against this form of protection, relate exclusively to the cost of the process it entails. Now, it is impossible for an unorganized industry, at any point of its progress, to attack an organized one without entailing loss and submitting to temporary disadvantage; and if immediate advantage alone is to be consulted, the industry of such a country must remain forever unorganized.* Is it, then, to be held that the wisdom or energy of private enterprise, alone, is equal to making the sacrifices required for the common good; or is this a dogma of such elevation as to entitle those who hold it to lecture, as from a superior moral standpoint, the holders of a contrary opinion?

"I apprehend that a new country, in imposing protective duties in favor of native industry, is simply doing, by a common enterprise, what individuals, both in an old and a new country, do when they endeavor to organize an opposition to an established industry.† And there can be no doubt as to the adaptation of the means to the end."

200. Devas on Protection.—The most valuable English chapter on protection is in Mr. C. S. Devas' "Groundwork of Economics," sections 136 to 142. He says: "The argument in favor of free trade is based on two fundamental assumptions. The first is that each country, if laws do not interfere with its imports and exports, will produce that for which it is physically best fitted. But this assumption is often untrue, and for two reasons at least. First, a country may possess many natural advantages (as coal beds, water-power, and water communications), which may remain unused, and the industries that might be founded on them remain unpracticed, because the costs of starting such enterprises are an insuperable barrier to their introduction as long as the produce of other countries, who have the advantage of priority, can be introduced unhindered. New industries, like new plants, may require shelter; when acclimatized they may be found to grow even more vigorously in their new home than in their old, and the cost of their earlier years is well repaid. Till the workpeople are well educated to the work, and

* *i.e.*, the country must remain without a due balance of manufacture against agriculture.

† *i.e.*, they put up or sink capital, knowing that, till loss is first sustained, gains can not be made.

the technical minutiæ of the industry adapted to the special conditions of the country, there may be a heavy national loss, the produce being got at much greater cost than what it took to produce the goods formerly exported in exchange for it. But these expenses, which would ruin any private enterpriser or private company, are, as it were, the expenses of a national apprenticeship, and when once the machinery is brought into full working order, and the human agents are trained, it may be found that much more is got from this form of national industry than from the previous production of goods for exportation. Costs of transport are saved, and especially use is now made of the rich treasures of external nature, and the, perhaps, richer treasures of national capacities and energies. To gain these advantages a protective tariff is likely to be the best means, by enabling and inducing enterprisers to introduce the new industry, and distributing the costs of the introduction as equably as well can be over the whole people.* Moreover, this temporary, tentative and acclimatizing protection, is more than ever called for, in a time when the great development of means of transport has greatly lessened the former natural protection, afforded by remoteness, and when, also, the assimilation of local and national tastes to a cosmopolitan fashion has nigh levelled the protection afforded by a variety of tastes." †

Mr. Devas then points out that protection, to the labor of one country, may also be made necessary by the oppression, slavery, or unnatural economic conditions prevailing in the country with whose labor it was obliged to compete ; also that a protective polacy may tend to nationalize and loyalize the more or less discordant elements of a nation, binding them together into a common interest and sentiment, and promoting industries which in any

---

* "Blind free-traders" (says Roscher, "Principles of Political Economy," translated by J. J. Lalor, New York, 1878, vol. ii., pp. 432, 433) "always like to assume that every man capable of working always busies himself, whereas idleness frequently excuses the wasting of its time by the plea that a remunerative market of the possible new products is improbable, or at least uncertain."

† "Under such circumstances it would be possible that a whole nation might be made continually to act the part of an agricultural district (*plattes-land*) to one earlier developed, leaving to the latter almost exclusively the life of the city and of industry. A wisely conducted protective system might act as a preventive against this evil, the temporary sacrifices which such a system necessitates being justifiable where some of the factors of industrial production unquestionably exist, but remain unused, because others, on account of the mere posteriority of the nation, can not be built up." He justly reprobates the term hot-house plant being applied to industries fostered by temporary protection. (Roscher, l. c. ii., 437, 438.)

way tend toward the unity or defense of the state, irrespective of their cost. He says: "Adam Smith urges that defense is much more important than opulence, approves the navigation laws, and does not condemn a bounty on the exportation of home-made sail-cloth and gunpowder; moreover, it is generally admitted that, besides being independent of foreigners for the supply of munitions of war, the supply of food ought not to be such as to be liable to interruption in war, as when Athens could be starved into submission by closing the Bosphorus, while a free-trader, like McCulloch, extends this precaution to any important article, saying that 'nothing can be more injurious . . . to the real and lasting interests of any great nation than to have any considerable portion of its population dependent on the friendship or policy of foreigners.'* But free-traders are only not unpatriotic because they leave one of their first principles in the lurch. And being compelled by common sense to make the concession in regard to national safety, they can be logically forced to admit that sound political reasons may in any case forbid free trade." Protection, he argues, aids in securing a country against disrupting tendencies fostered by foreign influence—may tend to prevent emigration and invite immigration—may help to so distribute and multiply occupations as to employ a much larger portion of the people in accordance with their tastes and capacities—may cause the food and clothing of the people to be made up and sold more honestly, as to quality, as artisans always deal more honestly in a home than in a distant market, and faults and swindling are more easily corrected. Home production also causes greater evenness of prices and certainty of supply.

"For in countries like Hungary, Egypt, and British India, with little accumulated wealth, if there is habitual exportation of grain, the superfluity of good harvests leaves the country, instead of being stored within it; and when a bad harvest comes there is not sufficient wealth to attract from abroad a supply of food; while even in the midst of a famine grain may continue to be exported, as from Egypt in 1833, from Ireland in 1845–6, and from India, when millions were starving in 1877–8. Protective laws, by favoring home trade at the expense of foreign trade, may hinder or mitigate such calamities."† Finally, Devas indorses Carey's argument that protection may help prevent a wasteful exhaustion

* Notes to "Wealth of Nations," xxv., p. 601.

† Roscher, "Ackerbau," section 157, gives numerous instances.

of soils by inducing a more diversified system of culture and rotation of crops, which can only be practiced where markets are near. This applies also to exhaustion of forests, fish, mineral treasures, and all bulky raw materials. He concludes that "violent denunciations of the one policy or the other as *per se*, and of necessity, foolish and mischievous, without any regard to the manifold diversities of period, people, and country, are out of place in the sober reasonings of science. Even to say that free trade should be the rule, protection the exception, or conversely, is more likely to mislead than elucidate ; and such a vague and general formula does not help us in the complicated discussion needed for each peculiar and actual case."

201. Prof. Perry's Free Trade Methods—Does, or Does Not Free Trade Employ Foreign Labor?—Prof. Arthur L. Perry's "Elements of Political Economy" has had a success like that of debased coins, due as much to its alloy as to its value. It discards the inductive or statistical method, as does also Mr. Mill, and says :

"It may be considered as a point already well settled by experience that no man's sagacity is sufficient to guide himself or others to any sound conclusions on this field who takes his stand at the outset, amid the whirl of interlocking phenomena, and then endeavors to work himself out through the entangling meshes which surround him at every step. Happily, there is no need of any such procedure. Happily, man is man, motive is motive, and exchange is exchange, and the apparent chaos of commerce can be resolved through these alone into harmony and order."

This is as if Descartes, in defending the assumption that planetary motion is due to a celestial ether moving in vortices, against Newton's theory of gravity, should charge Newton with taking his stand at the outset amid the whirl of interlocking phenomena, and should suggest that a much simpler solution of the problem lies in the fact that the earth is the earth, the sun is the sun, ether is ether, motion is motion, and vortices are vortices. The simplicity of such lines of proof is only apparent to minds that not only need no proof, but would not comprehend it if it were offered.

In arguing that the importation of foreign goods, as compared with their production in this country, involves no loss to the national industry, Prof. Perry commits the same palpable oversight which we have pointed out in Jevons, and this oversight

takes the place, with him, of both foresight and insight. He says (eleventh edition, pp. 396–7):

"Foreign articles are certainly wrought by foreign labor; do we then by buying them employ foreign labor to the prejudice of our own laborers? We are obliged to pay for every thing we buy—are we not? In what do we pay? Clearly, in the products of our own labor. We employ our own laborers to produce the articles we exchange for foreign articles. We pay for our imports by our exports. Our exports are created by home labor, and the only possible way for us to obtain the results of foreign toil is to offer in exchange the results of domestic toil. *A commercial nation therefore not only does not, but it cannot, employ foreign labor.* The more it buys of foreigners, the more home labor it must employ to create the articles with which it pays for what it buys, etc., etc."

To employ American labor in creating the price, commodity, crop, or *quid pro quo* which we exchange for a product, employs only half as much American labor, as to employ American labor, in creating both, that with which we pay, and that which we pay it for. If, for instance, we raise corn to buy iron, he claims that we encourage American labor equally whether we buy foreign or American iron, because in either case we pay for it with the products of American labor. But, in the purchase of foreign iron, only the price we pay represents American labor, while, in the purchase of American iron, both the price we pay, and the *thing we pay it for*, represent and are the fruit of, American labor. Supposing that, in both cases, we get the worth of our corn in iron, in the case of the imported iron we give employment only to the American labor that produces the corn, while in the case of the American iron, we give employment to the same amount of American labor in producing the corn, and to *an equal amount in addition*, in producing the iron.

This point having been stated very plainly by Adam Smith, both Jevons and Perry were bound to apprehend it in its true significance as an alternative between an importing policy, which it is admitted employs one capital and set of laborers, and a policy of home production, which employs two. The fact that neither Jevons nor Perry truly states the point, before assuming to controvert it, leaves the impression on the mind that they see that to state it is to make it incontrovertible on its face. Again Prof. Perry says on page 371 (eleventh edition) that the differences which give rise to international trade are a "diversity of original gifts, in climate, soil, natural productions, position, and opportunity," and an acquired "diversity of tastes, aptitudes, habits, strength, intelligence, and skill." He then says:

"It is on these diversities, original, traditional, and acquired, that international commerce depends; it never would have come into existence without them, and it would cease instantly and completely without them."

So far as international commerce arises out of diversity of natural conditions, as between a temperate climate and a tropical, or between a climate and soil like that of China, adapted to tea, or like Arabia and Brazil to coffee, protectionists say : "Off with all duties"—let these articles be free. Nor could any duty which could be placed on such articles be a protective duty, since there would be no domestic product to receive the protection. Hence, protectionists, in 1868 to 1870, were foremost in removing all duties from tea and coffee, and their principle requires them to strive to keep all duties off from tropical products, unless our territory extends far enough southward, as in the cases of sugar, oranges, and bananas, to admit of a portion of our people producing them. To these duties which protect nothing the free traders of the United States adhere, however, tenaciously, on the ground that they are, of all duties, the most purely for revenue only. Hence, Prof. Perry is inaccurate in claiming, as a free trade doctrine, a reason for taking off duties, which only applies to cases wherein the free traders as a party, and Prof. Perry with the rest, want the duties to be high, while only the protectionists take them off altogether. The duties, which protectionists desire to maintain, and free traders to abolish, are those which rest on products coming from England, France, Germany, and Canada, between which countries and ourselves there is no natural diversity but only substantial identity of climate, soil, and other conditions, and which produce, not an unlike crop, or product, to offer in exchange for ours, but the same crop or product, to offer in competition with ours, to our own consumers.

It is not true that a nation will cease instantly and completely to make iron, because another nation has richer mines, or more coal and lime, or could make the iron with less effort measured in days' work; on the contrary, such first nation may never find it possible to begin to make iron, if every ton it turns out, though by a third less labor, is converted into a loss of money, by being met with a ton of foreign iron, which will undersell it by a third in money.

By the report of Mr. Hewitt, American Commissioner to the Paris Exposition of 1867, on iron, it appears that as much iron could then be produced in Pennsylvania by one day's work as could be made in England by two, and in France by two days and a half. This settles conclusively the fact that all natural and acquired diversities favoring the production of iron were even then two to one in our favor, for we could produce iron by one-

half the effort that the English could, and by two-fifths of that expended by the French. But whether from such a division of the price of the iron, between the British iron-master and his workmen, that the latter got less than half the proportion paid to the American workmen, or other cause, the English iron-master did produce iron at twice the actual cost, in effort, and still sold it at a less money cost than the American producer.

As Mr. Devas truly points out, if the "diversity" on which a competitor depends for his ability to undersell us, is a disinherited and pauperized proletariat of starved workmen, undergoing eviction from their homes and exile from their country, is it not wiser in the interests of the whole human race to attract these pauperized workmen to the United States, where by one-half the expenditure of effort required in England, he can make as much iron as there, and get for himself a larger proportion of the cost of production as wages?

202. Why Canadians may Not have Free Trade with Vermont.—Prof. Perry asks (p. 396, eleventh edition) the following question:

"The south end of Vermont trades freely and advantageously with its neighbors across the line in Massachusetts; is there any good reason why the north end of Vermont should not trade just as freely and advantageously with its neighbors across the line in Canada?"

If Prof. Perry were asked why he did not teach political economy in Timbuctoo, where the mental darkness is very great, instead of in Massachusetts, where there is relatively almost a surplus of education, it might be difficult to compress, into one sentence, all the answers to so revolutionary an inquiry. But a first and sufficient answer might be, that the regents of the universities of Timbuctoo had not invited him; secondly, that Timbuctoo had no universities or regents; and, thirdly, that, as Timbuctoo does not protect its industries in any way, it had reached that acme of political wisdom, in which to export a Prof. Perry to it would be like carrying coals to Newcastle. So, in answer to Prof. Perry's question, it may be said: first, that the American tariff is designed to give American producers a first chance at American markets, and the Canadians, never having intentionally contributed toward the cost of maintaining American institutions, are not entitled to share in that first chance; secondly, that, as the Canadians and Vermonters both produce the same crops, they could have no motive to sell to each other; and hence, that the goods which would in fact cross the line would be En-

glish manufactures from Manchester, Birmingham, and Sheffield, seeking to undermine the American manufacturers in New Hampshire, Massachusetts, and Connecticut.

The people of the New England States have certain financial interests in common in which Canadians do not participate, and, on the other hand, Canadians have interests in common as members of one national family. While these interests relate primarily to government, education, mutual national co-operation and defence in war, yet they relate in many ways to trade, money, especially paper money, banks, bankruptcies, transportation, and other matters affecting business.

When a man has married a wife, and becomes the head of a family of his own, the closer relationship which thus binds him to his wife and daughters precludes the dignity and propriety of his receiving services from, and rendering attentions to, the wives and daughters of his neighbors, merely on the ground that, in a single transaction, it might be shown to be cheaper. The business life of two nations, like the social life of two families, is not a mere isolated transaction, but is a continuous national career, the dignity and utility of which requires that its several parts shall surrender some hypothetical freedom for the perfecting of the higher unities which ensue. The Vermonters and Canadians produce substantially the same products, viz. : lumber, grains, meats, potatoes, wool, hay, butter, and cheese. If Canadians were permitted, therefore, to trade free with Vermonters, it would not be with them that they would trade, but they would compete with them in selling the above products to the manufacturing, artisan, and exchanging populations, of New England and New York. As competitors, seeking to undersell the Vermonters, let us see whether the international boundary line does not mark a very great difference of conditions. The present value of the New England markets, to a farmer, grows largely out of the vigor of their manufactures, and the great number of persons dwelling in New England who are not engaged in farming. To secure these large manufactures, the Union had to be preserved from dissolution at a cost of many millions of dollars, and many antecedent losses and failures in business had to be undergone, in none of which Canada had any part. These manufactures are in part the product of patent laws, and in part of protective tariff laws, and in part of state aid, and in part of corporate and individual enterprise, and in part of state legislation, state education, and other state and national expenses, in which Canada has no share. From

1861 to 1873 the Vermonters paid their share of a national, state, and local taxation which amounted to about $850,000,000 a year, or $21.25 per capita for 40,000,000 people. As the head of a family at the average supports seven persons, this amounted for such an one to $150 a year. The Canadians, during the same period, were part of a nation of 3,692,461 inhabitants, who paid in taxes £3,534,760 per year, or about $4.50 per capita, or for a head of a family of seven persons about $31. For twenty years, the Vermonters were paying about fourteen per cent. of their earnings in taxes, while the Canadians were paying 3.1 per cent. Hence a tax of eleven per cent. on the proceeds of any sales, made by Canadians in this country, would have to be laid, to neutralize the lower rate of taxation prevailing for so long a period in Canada.

203. The Profit Argument: Protection Profits a Nation or Nations Would Not Protect. — Prof. Perry makes a supposed argument for free trade because trade is profitable to the individual, which applies equally in favor of protection, provided it be true, as all protectionists believe, that protection is profitable to the aggregate of individuals constituting the nation. The two parallel arguments would run thus :

PERRY FOR FREE TRADE.	THE SAME LOGIC TRANSFERRED TO PROTECTION.
Men do not engage in foreign trade for fun.	Nations do not enact protective tariffs for fun.
They engage in it for the sake of the mutual gain desirable by both parties.	They lay protective duties for the sake of the increased general prosperity it imparts to all their people.
They desist from it as soon as that mutual gain disappears.	They desist from it as soon as there are no longer any industries whose expansion by its means would promote the general prosperity.
And there is no mutual gain in any series of exchanges unless each party has a superior power in producing that which is rendered compared with his power in producing that which is received.	And there is no national gain in any protective tariff unless the state levying it has such natural resources for producing the article it professes to protect that the entire cost of bringing it into a state of profitable production will be far exceeded by the profits of its production.
We will suppose a trade between England and France in cottons and silks.	We will suppose a rivalry between England and America in the manufacture of clothing.
England sending cottons to France and France sending silks in return.	England desiring the profits of making American clothing, and Americans preferring to make these profits themselves, by the aid of a protective tariff.
When and how long will this be a profitable trade ?	When and how can these profits be profitably transferred to American producers ?

PERRY FOR FREE TRADE.	THE SAME LOGIC TRANSFERRED TO PROTECTION.
Then when efforts bestowed in France upon silks will procure through exchange with England more of cottons than the same amount of effort bestowed in France upon cottons will produce of cottons directly.	Then when American producers of clothing, through the stimulus imparted to their efforts by the assured control of at least the American market, have so brought the artificial facilities of production, such as dimensions, division of labor, capital, machinery, skill, and credit, alongside of the natural resources which they had at the start, that they are superior in both, for when this happens they will excel their competitors in quality of goods, dispatch in turning them out, credits in selling them, and cheapness.
And then when efforts bestowed upon cottons in England will procure more of silks than the same amount of efforts bestowed in England upon silks will produce of silks directly.	And then when efforts bestowed upon transferring the place of production from England to America through protection result in a more abundant and cheaper production per capita in America than the same amount of effort bestowed on the expansion of the production of clothing in England would have produced of abundance and cheapness in America.

It is not true in fact that the exchange of commodities is necessarily profitable to either party, any more than it is true that production or legislation is necessarily profitable. People may make trades in which both parties lose, or in which one loses and the other gains, or in which they both gain. Legislation itself is an exchange, in one form. It is the exchange, or trade, of the old law for the new one. Hence, to assert that all exchanges are profitable, would include that all laws are profitable, and hence that protective laws are profitable. We use these illustrations, merely, to point out that plausible phrases must not be mistaken for substantial proofs.

Prof. Perry seems honestly to believe that when he has once established that international traders trade at a mutual profit, and not at a loss to each other, the doom of protection is sealed. He elaborates, with painful assiduity, his demonstration that traders trade at a profit, *ergo* no taxes should be collected on imported goods ! It is difficult to doubt that such financiers and publicists as Colbert, Napoleon, Bismarck, Beaconsfield, Von Beust, Thiers, Mazzini, Alexander Hamilton, and even Clay, Webster, Lincoln, and Dr. Henry C. Carey himself, are competent to suspect that traders often trade at a profit. If so simple a clue as this could solve the question, the tariff question would come in just after mumble-peg, or marbles.

All industries are unprofitable at the beginning, in proportion to their complexity and ultimate value. When the first glass bottle was made in Pittsburg, its maker, O'Hara, charged its cost on

his books at $30,000. But the second glass bottle cost but a cent. Now, if O'Hara had known that the science of society consists in profitable swapping, instead of introducing a new industry, he could have learned from Prof. Perry where he could get his first glass bottle cheaper, by $29,999.99 , than by making it.

There was a time when the French could not make silks in competition with Genoa. France would never have begun to make silks, had she not removed by her tariff the disadvantage and loss her people would incur, until their works acquired the dimensions to rival the Italians. The more complicated the conditions of success in production, the greater the loss by the first swap of the old industry for the new. A farmer who sends his boy to school loses the value of his labor for the time, and submits to a tax for his tuition, in the hope that he may be a better and more rapid and skillful producer, through the knowledge he will there acquire. All shrewd business is a wise sinking of present advantage for a far greater future gain. Why may not a city, state, nation, take this course as well as an individual ? Prof. Perry might have explained to the New Yorkers, that the first glass of pure water they could get from the Croton River would cost them $10,000,000, while they could get it elsewhere at two cents a glass. But they did not hesitate to tax themselves heavily, to bring water by aqueducts, to build docks for ships, to pave and light the streets, to lay out parks for the amusement of the people —in short, to do any and every thing, which could attract residents to New York, and make business thrive. According to Perry's barren doctrine, they should have confined the duties of government to simply keeping the peace. But why keep the peace, thus discriminating against those who would break it ? And how can peace exist when work can not be had ? Suppose that at present the country could raise the wheat, cotton, and petroleum to pay for 500,000 tons of foreign bar iron per year, with less labor than they could produce the bar iron. That forms no reason why we should not strive to place ourselves in a position to make the iron next year cheaper than we can import it. As we have already quoted, the same amount of effort or labor which, in England will make one ton of pig iron, will here make two tons. If half the iron-workers in England, therefore, could be set at work here, they would produce as much as the whole now do. As their places would be supplied from the surplus and unemployed English paupers, the tendency would be

to add to our product the whole product of England, and leave her product unimpaired. Three-fourths of the cost of iron consists of agricultural products, raw or manufactured. American iron represents our own crops consumed by laborers in making it. English iron represents mainly European crops. Hence the increase of our bar iron manufacture by 500,000 tons, worth, say, $35,000,000, would not only furnish American farmers with a market for the crops which pay for this iron, but also for the crops consumed in making the iron, which are as much more. In other words, if we buy $35,000,000 of bar iron from England, we export products of the farm and plantation, and so find a market for $35,000,000 worth of crops. But if we buy the same amount of American iron we find a market, first for the $35,000,000 required to pay for the iron, and, in addition, for $31,000,000, or thereabouts, of American crops consumed in making the iron.

204. Cost of Labor in America and Europe.—In all research we are certain to arrive at false conclusions, if we adopt our theory first and insist that facts shall agree with it. In the following statement of the relative dearness of labor in this country compared with its cost in Europe, Prof. Perry is misled by a too trustful confidence in, and misapplication of, one of Ricardo's half-truths. He says (p. 422):

"The cost of labor must be lower in this country than in Europe, because the rate per cent. of capital is higher. Labor and capital alone conspire in production. Profits are the leavings of the cost of labor. If, therefore, on every hundred invested the rate of profit is higher, the conclusion is unavoidable that the cost of labor is lower."

This assumes that the ratio of the joint product of labor and capital, to the principal invested, and the effort made, is the same in Europe as here, whereas it is four times greater here than there. If $1,000, and 1000 days' works combined, earn four times more here than in Europe, capital would get higher interest here, without its following that labor would get lower wages. On the contrary, if capital got only a two-fold higher interest, labor might get a six-fold higher wage. Thus, if the two combined earn $10,000 here in a given period, and only $3,000 in the same period in Europe, and in Europe wages might take $1,000, and here $6,000, its leavings for capital would still be $4,000 here, against $2,000 in Europe. After paying six times as high wages, it might still pay a two-fold higher interest.

No schedule of relative wages here, and in Europe, would

sustain Prof. Perry's error. He plainly does not mean by "cost of labor" the cost of machine labor, or of production, but of human labor time. The four hundred thousand emigrants coming from Europe to this country every year are the best proof that wages are higher, relatively to cost of living, here than there. On the next page he says:

"Our bureau of statistics gives the wages of fourteen classes of operatives in woolen mills in England, and the corresponding wages here reduced to gold. Our average is only 21.89 per cent. higher than theirs."

This would seem to refute his previous position that the cost of labor is less here than in Europe. But doubtless in Prof. Perry's view the proof that American labor costs only 21.89 per cent. more than that of Europe, fully sustains his own statement that it costs less! Prof. Perry may even, so differently are we constituted, regard a statistic showing that wages are 22 per cent. higher in America than in Europe, as proof that the cost of labor is 22 per cent. lower, since capital must get more here or it would not pay such high wages, and if capital gets more—Presto—labor must get less! One could as well reverse the proposition and prove that our rates of interest are lower by assuming that our wages are higher. If capital and labor can earn in conjunction about twice as much here as in England, because of the greater general productiveness of industry, they will have twice as much product to divide, both will get twice as much—the one in wages and the other in interest. Assuming that the rates of wages in certain industries are only 21.89 per cent. higher here than in England, that would render a tariff of 21.89 per cent. on the importation of the product of that labor from England, necessary in order to place the producers of the same product here in a position to compete on equal terms with those in England. How much more shall we allow for difference in rates of interest on capital, and for our more burdensome taxation to pay off the public debt? These three causes together would be very likely to make a difference of 35 per cent., to which extent our tariff of duties on imports would be merely a compensation for difference in rates of wages and capital.

In 1868–9 the following were the relative rates of wages in nineteen principal industries in the United States, and in two of the countries with which our manufacturers principally compete, both in our home and foreign markets:

Branch of Industry.	Prussia.	Great Britain.	United States.
Cotton mills	$2 88	$3 87	$5 25
Woolen mills	2 52	5 20	7 60
Worsted mills	2 40	5 14	7 13
Sugar refineries	....	5 85	9 85
Iron rolling mills	4 02	7 83	8 70
Steel works	3 60	8 36	13 17
Machine shops	3 90	5 46	9 88
Hardware, man	3 60	6 30	9 42
Edge tools, man	3 62	7 00	11 10
Agricultural implements, man	5 24	6 75	13 76
Firearms, man	4 39	8 17	12 63
Saw, man	3 60	7 85	12 00
Gas works	....	6 88	10 58
Leather, man	3 35	5 50	9 83
Glass works, man	2 74	7 62	10 37
Silk hat, man	....	6 60	13 40
Paper mills	2 50	4 84	9 00
Wood shipbuilding	....	6 16	11 70
Iron shipbuilding	....	6 70	10 00

The following were at the same period the relative rates of weekly earnings paid to the puddlers:

United States	$16 54 gold.
England	8 75 "
France	8 00 "
Belgium and Rhenish Prussia	6 00 "
Russia (Vicksa Ironworks)	1 93 "

In the Western Association of Iron-makers, including those of western Pennsylvania, the wages are graduated according to the price obtained for the product. It would, perhaps, be a still further advance from dividing according to price, to divide according to profits.

These rates may be supposed to have been influenced by the conditions incident to recent war. The *Canadian Manufacturer* condenses as follows the annual report of the Massachusetts Bureau of Labor, upon the relative condition of working-men in Great Britain and Massachusetts, in 1883. The inquiry was exhaustive.

The comparison is based on pay-rolls obtained from two hundred and ten establishments in the State, and one hundred and ten in Great Britain, to obtain which thirty-two towns and cities in the former, and twenty-six in the latter, were visited. The industries covered by this special comparison for 1883, and for which statistics were gathered during the last four months of the year, involved 74.9 per cent. of the total products of the manufacturing industries of Massachusetts. The general result of the inquiry appears in the following table of the average weekly wages paid employees:

Industries.	Massachusetts.	Great Britain.
Agricultural implements	$10 25	$8 85
Artisans' tools	11 80	4 89
Boots and shoes	11 63	4 37
Brick	8 63	4 16
Building trade	14 99	7 21
Carpetings	6 08	4 11
Carriages and wagons	13 80	4 89
Clothing	10 01	6 71
Cotton goods	6 45	4 63
Flax and jute goods	6 46	2 84
Food preparations	9 81	2 72
Furniture	11 04	7 96
Glass	12 28	6 94
Hats (fur, wool, and silk)	11 01	5 51
Hosiery	6 49	4 67
Liquors (malt and distilled)	12 87	12 66
Machines and machinery	11 75	6 93
Metals and metallic goods	11 25	7 40
Printing and publishing	11 37	5 52
Printing, dyeing, bleaching, and finishing cotton textiles	8 67	4 94
Stone	14 39	8 68
Wooden goods	12 19	5 67
Woolen goods	6 90	4 86
Worsted goods	7 32	3 60

All industries, Massachusetts, $10.31; Great Britain, $5.86.

The statistical tables show not only this general advantage to all wage-earners in the protected country, irrespective of age or sex, but afford a means of arriving at the ratio of wages paid women, young persons, and children to those paid to men. Taking the average wages paid to men as 100, in Massachusetts the ratio of those paid to women is as 51.39 to 100 (that is, the average wages of women are a little more than one-half as much as those paid to men), those paid to young persons 43.04 to 100, and those paid to children 32.15 to 100. In Great Britain the ratio for women is 40.92 (men's wages considered as the unit, or 100), for young persons 29.6 to 100, and for children 9.56 to 100. In Massachusetts, on the average, one woman, young person, and one child working together, would earn as much combined as 1.26 men; in Great Britain they could only earn .79 as much as a man, or 59.4 per cent. in favor of the women, young persons and children of Massachusetts. There is in Great Britain no branch of industry of those considered, in which men are employed, in which the prevailing average weekly wage rises above $20, while in Massachusetts, in eight per cent. of the occupations, the average weekly wage exceeds that figure, reaching

$40, or double the highest average weekly wage in Great Britain. In Great Britain there is no branch of these industries in which women are paid more than $6 per week on the average, while in Massachusetts, in 53 per cent. of the various occupations or branches of industry, the average weekly wages exceeds $6 per week, reaching as high as $19, or more than three times the highest occupation average for Great Britain. In Great Britain $6 is the highest occupation average, for young persons in these industries ; the occupation average in Massachusetts reaches to $11, or nearly double the Great Britain highest occupation average for young persons. In the case of children, the highest occupation average, in the industries considered for Great Britain, is $2, while in Massachusetts, in 98 per cent. of the branches of these industries in which children are employed, the range is higher, reaching $7 in a small percentage of the occupations.

On the other hand, the cost of living is somewhat higher in Massachusetts than in Great Britain, the exact difference being 17¼ per cent., of which 11¼ per cent. arises out of the one item of rent. The question of expense is insignificant compared with that of wages, which under protection, by a close and careful test, are shown to average nearly double, in Massachusetts, those prevailing in Great Britain.

Says Wendell Phillips :

"Putting aside all theories, every lover of progress must see, with profound regret, the introduction here of any element which will lessen wages. The mainspring of our progress is high wages —wages at such a level that the working-man can spare his wife to preside over a 'home,' can command leisure, go to lectures, take a newspaper, and lift himself from the deadening level of mere toil. That dollar left after all the bills are paid on Saturday night means education, independence, self-respect, manhood ; it increases the value of every acre near by, fills the town with dwellings, opens public libraries, and crowds them, dots the continent with cities, and cobwebs it with railways. The one remaining dollar insures progress, and guarantees millions to its owner, better than a score of statutes. It is worth more than a thousand colleges, and makes armies and police superfluous."

The freedom of the working classes may be secured by the ballot and laws, but it is created by and is proportionate to wages. Low prices for the products of labor (machinery, and other facilities of production being equal) mean low prices for labor itself, for no employer can pay high wages to his workmen and sell the

products of their work at as low prices as one who pays half wages, unless he does so by having more machinery, cheaper tools, a larger capital, or force, or some other facility which the employer at low wages can not equally command.

In the case of the American farmers paying higher wages than the English, yet underselling the English in wheat, beef, and pork, the struggle is really not in the main between the two classes of laborers, but between cheaper land and machinery on one side and dearer on the other. Nor is it possible for the American manufacturer to have at present as cheap capital, or more or cheaper machinery, than his English rival in most industries. In some occupations, however, as shoemaking, watchmaking, and farming, the American workman has cheaper machinery, and makes a larger use of it. Freights on American railroads are about one-third the English rates per ton per mile.

205. Making Taxes Productive.—Prof. Perry says (page 389):

"How anybody can intelligently suppose that a system of taxes can be so cunningly adjusted as to become a positive productive agent, a spur to the progress of society, they must explain who suppose so. I myself once supposed so. But it was when I was in ignorance of the real nature and operation of such taxes."

Prof. Perry could not have produced the book in which he denies that taxation can produce anything, except by taxing his intellectual energies. A slightly larger per cent. of taxation would bring its views into harmony with the interests of society and the exigencies of statesmanship. He has advised, however, a system which would do, if a state needed no revenue, and a nation no unity. The farmer taxes himself severely to raise his crops, the parent to support his family. Society is everywhere sustained by mutual taxation. Most colleges are the product of self-imposed taxes, laid either on the rich by themselves while living, or by the dying on their heirs, or by the state on the tax-payers. Society itself is a network of reciprocal taxation, levied to effect a network of reciprocal service.

Taxes, when collected, are in the hands of the government capital with which they may promote production in ways more effective than individual capital could ever do. The taxes that open and improve our roads, pave our streets (in cities), build our piers, dig our Erie canals, bring water into our cities, educate our children in common schools, clear our rivers for navigation, and so on, are laid solely to promote production? Why should capital lose its fructifying and productive power when it passes into the

hands of the state? Since capital is useful only in commanding the services and energies of our fellow-men, and taxation is a mode of commanding these very services and energies, why is not the power to tax, itself, a form of capital, and therefore fruitful?

If, as we have said, the average rates of wages paid in 1868 to 1873 were, in fourteen different manufacturing industries, twenty-two per cent. higher here than in England, and if rates of earnings for capital employed in conjunction with labor averaged fifteen per cent higher, and if our taxation, national and state, made a further difference of five per cent. more in cost of production, then it would follow that in all kinds of production which England could carry on with the same expenditure of effort as ourselves, our price would need to be forty-two per cent. higher than the English price. Otherwise we would be absolutely excluded from carrying on all those kinds of business which we could conduct with the same expenditure of effort as the English. We should have been also excluded from all such kinds of business as would demand of them less than forty-two per cent. more of effort than they demanded of us. This would have discharged several millions of our wages-working class. But just here comes in the opportunity to make taxes promotive, or at least defensive, of production. We levied twenty to sixty per cent. duties on such articles as competed with our own industries, and what was the result? We continued, at a profit, the production of all products which we could produce with the same expenditure of effort as our foreign competitors. We sustained our rates of wages, and yet diversified our industry, by defending all branches of production which we had equal natural powers with other countries for carrying on.

206. Collecting Taxes from Foreign Producers.—But this was not all. The schedule* consists of articles the duties on which, in 1870, were paid entirely, or substantially, by foreigners. There were others in which foreigners paid a portion, greater or less. On these they paid the whole duty. A careful study of the table may show that it is, after all, possible, not only to devise a system of taxes which will be a productive agent, but which will be an economy instead of a burden to the taxpayers.

Of each of these articles, we produce from fifty to a thousand times as much as we import. Which of them will Prof. Perry

* The following is a table of articles, the price of which is fixed *wholly* by American

take as a test, and say that the duty is added to the selling price of the whole quantity consumed, whether imported or produced here? If he says this of butter, our farmers would smile to learn that Congress can, by a mere act of legislation, raise the price of all the butter consumed in the country by four cents a pound. So of all other articles. The duties on these are $19,000,000. This is a very moderate part of the total revenue paid by foreigners under our protective system. It aims to include none of the cases in which foreigners pay part of our revenue and American consumers pay the balance. In the cases of all articles in which competition between the foreign and Amer-

---

production, and consequently the duties on which are paid wholly by foreign producers:

IMPORTATIONS FOR THE YEAR ENDING JUNE 30, 1870.

Commodities.	Quantities.	Values.	Rate of Duty.	Amount of Revenue.
Butter, lbs	4,089,098		4c. ℔ lb	$163,563
Brick		$64,374	20 ℔ cent	12,874
Candles, lbs—				
Star, stearine	6,824		5c. ℔ lb	362
Paraffine, sperm	10,754		8c. ℔ lb	860
Cheese, lbs	2,289,257		4c. ℔ lb	91,570
Hops, lbs	21,568		5c. ℔ lb	1,078
Coal, tons	415,728		$1.25 ℔ ton	519,661
Copper ore	701,323		3c. ℔ lb	22,839
Gypsum		46,479	20 ℔ cent	9,349
Glue		184,542	20 ℔ cent	36,913
Lead, lbs	80,916,724		2c. ℔ lb	1,718,051
Leather		4,554,260	30 ℔ cent	1,367,261
Beef and Pork	840,074		1c ℔ lb	8,400
Bacon, hhds	138,599		2c. ℔ lb	2,771
Eggs, yolks of		410,416	10 ℔ cent	41,046
Linseed oil, gals	129,557		23c. ℔ gal	29,798
White Lead, lbs	6,228,285		3c. ℔ lb	186,846
Paper—				
Printing		69,021	20 ℔ cent	13,804
Writing		145,743	35 ℔ cent	51,090
Potatoes, bu	88,978		25c ℔ bu	22,244
Rice, lbs	30,037,640		2½c ℔ lb	755,502
Salt, lbs	569,658,703		18 and 24c. ℔ 100 lbs	1,198,552
Tallow, lbs	33,693		1c. ℔ lb	336
Lard, lbs	19,956		2c. ℔ lb	339
Cigars, lbs	525,726	1 690,477	$2.50 ℔ lb and 25 ℔ cent	1,737,533
Vinegar, gals	263,819		10c. ℔ gal	26,405
Firewood		227,788	20 ℔ cent	45,604
Furniture		805,881	35 ℔ cent	282,113
Lumber		6,660,156	20 ℔ cent	1,334,751
Clothing—				
Cotton		6,382,078	25 ℔ tent	2 233 741
Silk		455,987	60 ℔ cent	273,592
Wool		3,028,361	50c. ℔ lb and 40 ℔ cent	1,762,806
Pig Iron, tons	179,848		$9 ℔ ton	1,618,632
Wheat, bu	509,724		20c. ℔ bu	101,944
Flour, brls	63,939	290,907	20 per cent	58,181
Barley, bu	6,725,496		15c. per bush	1 008,824
Oats, bu	2,131,690		10c. per bush	213,169
Corn, bu	89,005		10c. per bush	8,900
Wool, raw	5,430,322		10c. per lb, and 11 per ct.	2,228,840
Total				$19,189,358

ican producer is made active by the advances of the latter toward supplying a product which the former has previously supplied, the foreign producer pays part of the revenue in order to hold his market. Such are the cases of bar iron, imported hardware, cotton, and woolen cloths. The proportion of duties paid by foreigners on these, at present, has never been officially investigated. We judge it to be from a third to half of the duty. In that case, about forty millions ($40,000,000) of our tariff revenue are paid by foreign producers. John Stuart Mill concedes this capacity of a tariff on competing products, to collect revenue from foreigners. Mr. Perry, by ignoring, virtually denies it. On the contrary, he denounces those particular duties as "robbery of the American taxpayer," which are not paid by the Americans at all, but are a net gain to them as taxpayers. We correct Perry by the more judicious candor of Mill, in this regard. In vol. ii. page 457, of his "Principles of Political Economy," he says: "Those are therefore in the right who maintain that taxes on imports are partly paid by foreigners." And again, on page 458, he says concerning "duties not sufficiently high to counterbalance the difference of expense between the production of the article at home and its importation": "Of the money which is brought into the treasury of any country by taxes of this last description, a part only is paid by people of that country, the remainder by the foreign consumers of their goods." And again he says (same page) "a non-protecting duty would, in most cases, be a source of gain to the country imposing it, in so far as throwing part of the weight of its taxes upon other people is a gain." And again, "the only mode in which a country can save itself from being a loser, by the revenue duties imposed by other countries on its commodities, is to impose corresponding revenue duties on theirs."

The entire $123,000,000 of duties on the imports of 1867, which we have above classed as "protective," were, according to Mr. Mill, revenue duties. They were not so high as to "counterbalance the difference of expense between the production of the article at home and its importation." If they had been, the articles, on which the duty has been actually collected, would not have been imported. Hence, that duties were collected upon them proves that the duty was not high enough to prevent their importation. Hence, they were revenue duties. Hence, a part of them was paid by foreign manufacturers and merchants. It is easy to perceive the inducement which leads a foreign manu-

facturer or producer, in certain states of the market and of prices, to pay the duty himself. He can not always know, when he pays the duty, at what price he can sell the goods. He is as liable, therefore, to lose the duty as he is to lose any other element of cost. As he can not be sure his price will cover wages, rent, or interest, neither can he know it will cover duties.

A manufacturer in Sheffield, England, makes cutlery, and has usually shipped to America knives which cost him $4 a dozen, to be sold at $6 a dozen, whereby he controls the market, as the American manufacturer can not make them less than $7. A duty of $3 a dozen is laid on them. He says: "Now, I can not sell these knives for more than $7.50 a dozen, for at that price the Americans can make the same knives at a profit, and if I sell at $8, they will cut me out of the trade altogether. I will therefore pay the duty of $3 a dozen myself, sell them at $7.50, and have fifty cents profit, instead of selling them at $6, with $2 profit, as I did before the American duty was imposed." The effect, therefore, is:

1. The price of the knives to the American consumer is not raised, by the amount of the duty, $3, as many free traders would say, but by only $1.50.

2. The amount of the duty is not charged over by the importer on the consumer, as the free traders assume, and paid by the American purchaser of knives. It is paid one-half thereof out of his previous profits, of which it absorbs three-fourths, by the British manufacturer, and one-half thereof out of the rise in price, which latter—one-half of the duty only—is paid by the American consumer.

3. Though the price of the article is raised by $1.50, yet, had the tax been levied in any other manner whatever, the price of whatever it was levied upon must have been raised $3. American consumers, therefore, have not only got rid of $1.50 of tax, by collecting it out of their British cousins, but have avoided $1.50 of the rise in price, which would have resulted somewhere else, and on something else, if they had levied the tax where Americans would have to pay the whole of it.

4. American manufacturers, who had previously been undersold by $1 a dozen on knives, now find they can make them at a cost of $7 a dozen, to start with, and make a profit of fifty cents a dozen. But as they go on, and their skill, organization, and capital increase, they constantly tend to produce them more cheaply, until, at last, they can produce them at $6, $5, or $4 a

dozen, and the foreign manufacturer is finally and forever undersold, and driven out of the field.*

207. Whether the Duty Raises the Price on the Whole Domestic Product.—Prof. Perry seizes upon the class of articles which are almost wholly produced in this country, and in which, therefore, the tariff is in most cases nearly or quite powerless to affect the price, as being those in which it operates on the largest scale as a tax on consumers. Thus he (nineteenth edition "Political Economy," page 486) says:

> If now we may fairly suppose that, on the average, for each one foreign article paying a duty into the treasury, there were four domestic articles raised each in price as much as the foreign article paid in duty, then it follows that the people paid in each of those years under chiefly protective tariff taxes $632,000,000, or $12,640,000,000 in all, no penny of which went into the treasury of the United States; that this is a reasonable supposition appears partly from the known proportion between imported and domestic as to several leading articles; for example, of steel rails in 1880 the domestic was 20 times the imported, and the people paid 19 times more under the duty than the treasury got; on woolen blankets in 1881 the Treasury took in less than $2,000, while the people paid in the *extra* price of blankets more than 1,000 times that sum that year,—and on iron goods of all kinds we have seen that the average duty was about 77 per cent., while the vast bulk of iron consumed is known to be of domestic production.

This pyramid of accusation rests on that small apex, the opening "if." Political economy cannot be built up into a science, on "if we may suppose." We mayn't suppose any of these things, because none of them are true. "If," in 1880, steel rails sold below iron rails, at one-third the price steel rails brought when we were dependent on the importation, and at less than pig iron had sold for in the two last periods of low duties, viz., 1857 and 1837, the duty which had so reduced prices would not "tax" the American buyer of rails, even if it should, by depriving English makers of their largest market, knock the English price still several points below the American. "If" the duty had increased the price of steel rails, and like duties had also increased prices of all commodities, and also the volume of all means of payment, it would not be a tax. Railroad companies are not taxed in buying steel rails at $10 a ton more than English prices, if they pay for the American rails in transportation, and must pay for the English rails in money which they haven't got.

Nor are farmers taxed by the duty on steel rails, if it appears that the substitution of steel rails for iron, at whatever price, is always a relief from cost of transportation, and never an addition to it; that farmers pay for transportation, not at all according to cost, but according to the ratio of the quantity of goods to be

* See the figures and diagram verifying this in the case of salt, *post*, ch. 16.

transported to the means for carrying them, and, finally, that by whatever argument a duty adds to a price, the farmer is getting 4 cents a pound more for his butter, and a like increase on all his other products, because of the duty.

The Iron and Steel Association publishes a list of relative prices, in store, of English and American iron and steel wares in 1882, as follows:

	English price.	*American price.*
Axes, No. 2, per dozen,	$9	$9.50
Augers, cast-steel, per dozen,	1 inch, $4.48; 2 inch, $12	1 inch, $5.76; 2 in. $11.52
Auger bits, per dozen,	1½ inch, $4.48	1½ inch, $3
Chisels, socket framing, per dozen,	1 inch, $3.72; 2 inch, $7	1 inch, $5.76; 2 in. $8.74
Hatchets, shingling, per dozen.	No. 2, $6	No. 2, $5.25
Pickaxes, best assorted, per cwt.	$7	$9
Saws, hand, 26 inch, per dozen,	Common, $6; best, $13.48	Common, $5; good, $15
Saws, cross-cut, each,	4 ft. $2.36; 4½ ft., $2.60; 5 ft., $3.12	4 ft. $2; 4½ ft. $2.25; 5 ft. $3.12
Planes, jack, 18 inch, 2¼ double iron, per dozen,	$15	$10.20
Strap hinges, light, per dozen pairs,	6 inch, $1.48	$1
Wrought-iron hasps and staples, 8 inch, per dozen,	$0.72	$0.65
Coffee mills, box, square, No. 1, each,	$0.84	$0.67
Cast-steel shears, trimming, common 8 inch, per dozen,	$6	$4.20
Shovels, No. 2, square, per dozen,	$7.48	$5
Door-knobs, mineral,	$2.48	$1

These prices show that, as to iron and steel wares in 1882 (and the facts were essentially the same from 1868 to 1880), the duty did not operate as any tax whatever on the American consumer, since American prices were as low as the foreign.

As to woolen blankets the facts are similar. In 1882 the writer, in a lecture before the Revenue Reform Club at Brooklyn, exhibited three woolen blankets, one made in Manchester, one in Minneapolis, and one near Boston. The English blanket was the only one of the three that contained any shoddy whatever, as could be tested by pulling out a pinch of the wool. Yet the manufacturer's price on each of the three was 68 cents per pound.

As to steel rails, the prices have been higher in America than in England, sometimes by the amount of the duty, and sometimes by only a varying fraction of that amount. As the Americans have developed the manufacture of steel rails, until they now manufacture more than the English, it is plain that prices in England have at all times been much lower than they would have been, if we had called upon English makers to double their total production in order to fill our demand. Under the influence of our competition, prices which were $165 in gold in 1864 have fallen to as low as $28.50 per ton.

If it were true that wherever there is any importation, how-

ever small, under a duty, the duty enhances the price of the whole domestic product by the amount of the duty, the farmers of America would be the recipients of more taxes than all the governments of Europe combined collect.

For instance, we in 1869 imported 6,685,093 pounds of butter, under a tariff duty of four cents per pound, which paid the revenue $267,403.75. This, on the free-trade theory, added four cents per pound to the price of all the butter consumed in the United States, because the home price was raised by the duty. In 1860 we produced 460,509,854 pounds of butter; and supposing our production to have increased by 60 per cent., which was our average in other products, we in 1869 produced 736,256,897 pounds. Now, although this was one hundred times as much as we imported, yet, as our production of coal was forty times as much as we imported, and of lumber twenty-four times, and of pig-iron twenty-four times, it will be seen that the same principle applies to all, viz., that the importation is insignificant as a means of supply, compared with the domestic production. But, argues Prof. Perry, that makes no difference. The greater the amount of the domestic supply, the more certainly its producers have their price increased by the amount of the duty. Assuming this to be true, butter paid four cents extra per pound to the butter-makers on account of the duty being a tax on the consumers of butter, amounting to $29,454,275.88 annually.

Again, we imported 190,000 bushels of potatoes, which paid a duty of 25 cents per bushel, or $46,458.81. Now, according to Prof. Perry, the "potato monopolists" had the price of their whole domestic product enhanced by 25 cents per bushel. Our domestic product in 1860 was 152,000,000 bushels, or in 1870 say 243,200,000 bushels, the consumers of which must have paid for them $60,800,000 more than they would have been compelled to pay but for the tariff. For if it be not a rule that the foreign price with duty added fixes the price of the home product, "free trade" has lost its grievance.

Again, we imported grains, flour and meal, under an average duty of 15 cents per bushel, upon which we collected a total revenue of $954,616.46. Our domestic production of those articles amounted in 1870 to about 2,289,270,850 bushels, which, if increased by the average rate of duty on the amount imported, would have levied a tax on the consumers in favor of the "grain monopolists" of $343,290,627.50, or about equal to our whole national taxation. On these three articles, butter, potatoes, and

grains, the consumers would be paying the producers a tax, over and above the cost of production, amounting to $433,544,902.

Extending the same calculation to all of the 1,200 articles on which duties are charged, Prof. Perry might with the same ease assume and state that the people are taxed in all by the tariff at least five thousand millions of dollars, or the equivalent of all their annual earnings, leaving them absolutely not a crust nor a bone, except as all live on the protective taxes they collect.

A theory which results in such startling conclusions can with no more truth be applied to pig-iron, wool, salt, coal, and lumber than to grain, potatoes, and butter.

If it be said that grain, potatoes, and butter are articles of exportation as well as of import, so are pig-iron, cotton goods, salt, iron and steel manufactures, and lumber. Are our farmers collecting $433,000,000 of "private tax" on their grain, butter, and potatoes, over and above the sum paid the government on the portion imported of these articles? If not, neither are the American manufacturers of pig-iron, salt, lumber, and coal collecting a tax on their whole product equal to the amount of the duty.

On the contrary, if the true law of prices is that the price of any article depends on the ratio of the whole supply to the whole demand, and that the foreign price only contributes to regulate the domestic price in the proportion that the foreign supply bears to the domestic supply, then at what conclusion do we arrive? Our importation of coal, being adequate to supply only one-fortieth part of our demand, contributes one part in forty toward fixing the price. If there is a fall or rise of 40 cents per ton in coal, one cent per ton of the fall or rise may be credited to Nova Scotia. So, as we produce twenty-four times as much pig-iron and lumber as we can import, our importation of either only affects by one twenty-fourth the actual changes in price, and so on.

But if this be so, then the fraction of influence exercised by the foreign supply over the domestic price, is so insignificant as to make it substantially true in the cases of lumber, coal, pig iron, grains, butter, potatoes, flour, and, in a scarcely less degree, of rice and salt, that our domestic supply determines not only our own price but the foreign price of those producers abroad who sell their products in our markets; for butter-makers in Canada, and coal miners in Nova Scotia, will not sell their butter and coal to Canadians and Nova Scotians except at the price they can get

for it in the States. Now, in considering the price they get for their article in the States, they know first that they can get the average price of the States, and, secondly, that out of this price they must pay the duty. If they can afford to import at the price here prevailing, *and pay the duty out of what would else be their profits*, they import; if not, they stop importing. So that in all these cases where the ratio of the amount imported to the domestic production is small, and no particular quality in the imported article compels its importation—viz., butter, grain, lumber, coal, potatoes, salt, and wool,—the foreign producer pays the duty. It can not raise prices. It collects fully twenty millions of taxes out of those *foreign producers* whose industries compete with ours, and to whom free trade means freedom to profit by our high prices. This is not the only or the principal mode in which protective tariffs collect our revenue out of foreigners; but it covers about $20,000,000 of taxes so paid.

Free-trade observers are not wholly blind to the actual working of these duties on Canadian products. The *Chicago Tribune*, in discussing the gain the two countries, and especially Canada, would derive from annexation, asserted that the Canadians, as a rule, pay the duties both on what they buy from Americans and on what they sell to the Americans. A Canadian-American writes to it to know, if this be true, "then what becomes of the free-trade theory that the consumer pays the duty?" To this the *Tribune* replies:

> The consumer pays the price of the goods that are sold to him; *the producer only receives what is left after deducting tariff taxes*, freight, and middlemen's profits. The United States is the greatest and best market for Canadian agricultural products. It is in this country they find their best market for their surplus oats, barley, buckwheat, potatoes, and other vegetables, horses, fat cattle, veal, mutton, poultry, butter, eggs, and often for their fine wheat and flour, notwithstanding the high duties on all these products. Remove the duties, and the Canadian farmers would get from one-fourth to one-third more for all their surplus stuff, which would amount to many millions of dollars a year.

This is from the pen of a veteran editor, who has, at times, spent much time in Canada, studying the economic relations of that province to the American States. Mr. Medill's admission being true, the Canadians pay, on the products they market in the United States, as follows:

On $8,000,000 worth of lumber sent from the Ottawa district into New York and New England,	$1,690,000
On coal from Nova Scotia,	400,000
On breadstuffs, barley, and malt,	2,750,000
On potatoes, say,	500,000
	$5,340,000

The Canadians are indebted politically to the United States for their virtual independence of England, and industrially for markets which are not only the best in the world, but are a thousand miles nearer to them than they are to the greater part of the American people. The American tariff happily enables them, without the embarrassments of a political connection, to pay, as equitably as if they were states in the American Union, for the involuntary national sovereignty which has been thrust upon them by exterior forces, in which they had no desire to take part, and which they are under no military tax to maintain.

This is one of those cases to which the remark of Prof. Sidgwick ("Principles of Political Economy," p. 576) applies: "It must be admitted that the imposition of import duties is, under certain circumstances, a method, at least temporarily effective, of increasing a nation's income at the expense of foreigners, though, on various grounds, a dangerous method ; and the same is true of export duties, whenever a country has a monopoly of any product keenly demanded." The dangerous quality of such duties is not an economic but a political and military question.

208. Getting Cutlery by Making Buttons.— Prof. Perry says :

> Now, how can the free interchange of commodities lessen the demand for labor or the rewards of labor ? You are employing a hundred men. You wish to obtain a certain quantity of cutlery. Does it make any difference to you, or to the wages of your men whether you employ them directly in making the cutlery or in making the buttons with which you can purchase the cutlery from abroad ? If, by employing them in making buttons, you can purchase more and better cutlery (and if you cannot, there is no temptation to an exchange), is it not plain to reason that it is better for you, and that you can afford to pay them better wages, than if you employed their labor less effectively upon cutlery ?

Prof. Perry here begs the whole question by assuming that the full hundred men remain in full employment at full wages. But how does the case stand if you need to employ one hundred men, and only seventy-five of them can find employment at button-making, while the other twenty-five might find employment at cutlery ? Then, is it not plain that if you put them all at buttons, you are working for an over-production of buttons, a fall in their price, and, consequently, a fall in the wages of those who make them ? Or, if you employ only seventy-five at buttons, then they must not only support themselves, but also the other twenty-five who are doing nothing because you do not employ them at cutlery ? In all international exchange, the latter is the illustration that applies to the facts, because in all nations there

is a fund of unemployed labor which a greater diversification of industry would employ. If all the people in the United States could be induced to raise corn, corn would, of course, fall in price to, say, a cent a bushel, or almost nothing. The expenditure of effort required from each corn producer to raise it, would average four or five times as much at it now does, because we raise corn only under the most favorable conditions. We should then raise it under all possible conditions, and with labor least adapted to it. Since, if our whole population should go to raising it, we would sell it for one-twentieth its present price, though at four times as much labor per bushel, this would prove, in Prof. Perry's mind, the vast advantage which would result from our all raising corn, because we could raise it so much cheaper than if only part of us raise it. Yet it is plain that the real result would be that we could not sell our corn for enough of the necessaries of life to keep our people from perishing. Hence it is plain that, with sixty millions to find employment for, and to feed, we can more certainly employ them all, if we produce both our cutlery and our buttons, and also the crops they are purchased with, than if we produce either alone.

The actual experience of the cutlery trade in the United States is worth more than theory. When Dr. Francis Wayland, in 1842, wrote his free-trade text-book on political economy, American hardware was almost unknown. All production has three stages, and the free-trade sophistry varies to adapt itself to these stages. When a production is not yet begun, to protect it is folly, because it can never be made profitable. When the production is well under way, the argument becomes that it would have advanced much faster if it could have had free raw materials. When it has won the battle, and is exporting products, of which it was once predicted there could be no profitable production, the argument is that protection is restricting the export! In 1842, therefore, Wayland ridiculed the notion of expecting that we should become makers of cutlery. He said:

> We pay a heavy duty on cutlery in this country, while not a thousandth part of the cutlery used is made here. It would be vastly cheaper to pay a bounty sufficient to raise all the cutlery made in this country to its present prices, and it would be, for aught I see, just as good for the cutler.—*Wayland's "Political Economy,"* edition of 1842, p. 140.

A free-trader always wants a bounty to be substituted for a duty, because he loves the foreign manufacturer better than he loves the National Treasury. A bounty would be more and more

costly to the country as the production increased. A duty is cheapened, to the consumer, with every increase in the home production. It repeals itself as a tax, as home prices come down to the foreign.

The British Parliament's Select Committee on Scientific Instruction reported to the House of Commons, on July 15, 1868, that the manufactures of the United States had wholly or largely superseded those of Birmingham, England, in the common markets of the world, including the English colonies, in the manufacture of

Adzes,
Augers,
Axes—best article,
Brass ware (stamped),
Breech-loading muskets,
Buckets,
Carpenters' broad-axes,
Clocks,
Clothes-pegs,
Coffee-mills,
Coopers' tools,
Corn-crushers,
Cotton gins,
Cultivators.
Curry-combs,
Cut nails,
Door-latches,
Gas-fittings,
Gimlets,
Hay-rakes,
Hoes—for cotton,
Horse-nails,
Kibbling machines,
Locks—door, chest, cupboard, and drawer,
Mowing-machines,
Nuts and bolts,
Penknives,
Petroleum lamps,
Plows,
Plumbers' brass foundry,
Pumps,
Revolvers,
Rice-hullers,
Sausage machines,
Scissors,
Sewing machines,
Shoemakers' tools,
Table ware,
Traps—rat, beaver, and fox,
Washing machines,
Watches—machine made,
Weighing machines.

This state of our manufactures, as to cutlery, had been brought about by eight years of protection. For Dr. Wayland's advice had been followed from 1846 to 1860.

The London *Times*, commenting on the above report, said :

At this moment Birmingham is losing its old markets. A few years ago it used to supply the United States largely with edged tools, farm implements, and various smaller wares. It does so no longer, nor is the cause to be sought merely in the American tariff. It is found that the manufacturers of America actually superseded us, not only in their own, but in foreign markets and in our own colonies, and the Birmingham Chamber has the sagacity to discover, and the courage to declare, that this is owing to the superiority of American goods.

High as are the wages of an English artisan, those of an American artisan are higher still, and yet the manufacturers of the United States can import iron and steel from this country at a heavy duty, work up the metal by highly paid labor, and beat us out of the market after all with the manufactured article. How is that to be explained ?

The Americans succeed in supplanting us by novelty of construction and excellence of make. They do not attempt to undersell us in the mere matter of price. Our goods may still be the cheapest, but they are no longer the best, and in the country where an ax, for instance, is an indispensable implement, the best article is the cheapest, whatever it may cost. Settlers and emigrants soon find this out, and they have found it out to the prejudice of Birmingham trade.

The skill, greater ingenuity, intelligence, and progressive capacity of American workmen are due to their higher average wage indirectly. Here, mechanics and operatives receive so ample a compensation for their services that, for fifteen years, the chief motive in forming labor organizations has been not to secure themselves against want, but to perfect some scheme by which they can either rule their employers' business, or dispense with employers entirely. There, a temporary loss of employment drives them upon the parish for relief. No man engrossed with constant cares, and oppressed with half-satisfied wants, fighting his way from day to day, or from meal to meal, in the dull struggle for subsistence, can have leisure, inclination, or incentive to study out improvements in the processes by which he earns his daily bread. Steeped in ignorance and poverty, he learns his trade by rote, without knowing the principles with which it is imbued. He is regularly handling the tools and materials with which new experiments are to be tried. He witnesses regularly the operations of nature, whether in the motions and pressures of bodies, or in their chemical actions on one another. But these golden opportunities pass without fruitful suggestion, because they represent to his mind only a routine of methods by which he is able to secure a scanty subsistence. Few great discoveries have been made by chance, or by ignorant persons. They are generally accomplished by individuals of competent knowledge, and who are in search of them. Hence, while English workmen are skillful, expert, and useful, in a more automatic way, their inventive faculties since 1846 are relatively latent. What they formerly, under more favorable circumstances, contributed to improvements in machinery and fabrics, is largely lost of late to the avocations in which they have been trained.

The case, however, is very different with the American mechanic. Educated, well paid, well fed, well clothed, well housed, he is not consumed with those large cares, which preclude close application on the part of his employer to one special line of experiment. Nor is he borne down by those cruel deprivations, which beset the life of his English competitor. He is always in the way of intelligently perceiving what is wanting, or what is amiss, in the old methods ; and has a better chance as well as a stronger inducement to make the needed improvement. Our successful inventors have been "pushing" men, whose daily experience at their work has shown them some defect in its pro-

cesses, or suggested a more productive mode of reaching its results. In this way American information and ingenuity have been applied to the "edged tools, farm implements, and various smaller wares," instanced by the London *Times*, and carried them to such a degree of superiority over like products of English manufacture that they are driving the latter out of the markets of the world. Though not so cheap, measured merely by the selling price, they undersell competitors in usefulness, adaptability, and excellence.

In the opinion of the fathers of the Republic the question whether we ought to make both our cutlery and our buttons depended solely on whether our country produced both the ore of which to make the steel and the bone or other raw material of the button. In 1810 Jefferson, then President, wrote to Thomas Leiper, of Philadelphia, as follows:

"I have lately inculcated the encouragement of manufactures to the extent of our own consumption, at least of all articles of which we raise the raw material. On this the Federal papers and meetings have sounded the alarm of Chinese policy, destruction of commerce, etc. . . . But I trust the good sense of our country will see that its greatest prosperity depends on a due balance between agriculture, manufactures, and commerce, and not in this protuberant navigation, which has kept us in hot water from the commencement of our government, and is now engaging us in a war."

To Governor Jay, a little later, he wrote:

"An equilibrium of agriculture, manufactures, and commerce is certainly become essential to our independence. Manufactures, sufficient for our own consumption, of what we raise, the raw material—and no more. Commerce sufficient to carry the surplus product of agriculture, beyond our own consumption, to a market for exchanging it for articles we can not raise—and no more. These are the true limits of manufactures and commerce. To go beyond them, is to increase our dependence on foreign nations, and our liability to war."

According to President Jefferson, therefore, we ought to manufacture all the iron, steel, woolen, and cotton goods, for which we produce the raw materials, the iron, steel, coal, wool, cotton, breadstuffs, and provisions. And the fact that we export a large portion of our cotton unmanufactured, and import much of our dry-goods, iron and steel wares, etc., indicates what Mr. Jefferson would style "an unbalanced and protuberant agriculture," and "increases our dependence on foreign nations, and our liability to war."

209. Must a Nation Import Commodities in order to Export Them, or Buy Them in order to Sell Them?—In actual life it would be deemed absurd for a customer to apply to a merchant the doctrine that he must buy a farmer's load of pumpkins or potatoes, not because he wanted them, but because

unless he did so he could never sell sheetings or hardware to the farmer. But Prof. Perry says:

"If we will not buy, of course we can not sell. If we prohibit importations, we thereby necessarily prevent exportations; that is to say, we take away their market from those who manufacture or grow the goods which would be exported."

The meaning of this is that, if we will not import English iron, we can not find sale abroad for American grain, and our grain will decline for want of the foreign market.

The professor, in his preface, prides himself on this point, as being in some sort his pet hobby and private property. He attempts to correct President Garfield's statement that the fathers of the republic, from 1790 to 1816, argued the tariff question as fully as it has ever since been argued, by saying that they failed to present this point. The protectionists of the period referred to include every statesman, in both political parties, from 1790 to 1816. They did not present this alleged point because there were none among them who held this view.

Our exports are all free of duty, and our ability to sell corn in Liverpool depends in no degree whatever on our willingness to buy iron or any thing else—*except gold.* We sell our corn for bills of exchange drawn against either the products which the country to which we export sells us, or against products which that country sells some other country, and with the proceeds of which it pays us. If we will sell more corn for less money than the Germans or Russians, then we can sell our corn in Liverpool, and not otherwise. If it were possible for one nation steadily to produce all the wares it needed for its own consumption, and at the same time to produce cheaper than all other countries that which they would need, it would import their gold steadily until the rise in its prices, occasioned by this importation of gold, would raise its money cost of production of goods to a figure at which foreign nations would cease to buy them.

The countries, against whose products our protective duties discriminate most, are those which take nearly all of our exports. The countries, on whose exports we impose no duties, take hardly any of our exports. Between us, and the countries against whose exports our tariffs discriminate, there is a continual balance of trade in our favor, and they are sending us gold, while between us and the countries whose products we admit free, the balance of trade is largely against us. For instance, all our duties for the protection of American manufactures rest on the imports from England, Scotland, Ireland, Denmark, Belgium, Holland, Russia,

Spain, Portugal, Sweden, Norway, and Germany. Averaging the exports and imports for the two years 1880 and 1881, so as to arrive at the mean per year between the United States and these countries, constituting Europe, we find that we sent to all these countries exports amounting in value to $717,026,542 per year, and bought from them imports amounting only to $360,229,555, leaving a balance in our favor of $356,796,987 per year. If this had been the whole of their and our foreign trade, it would have constituted an actual net balance of trade in our favor, causing an influx of gold to that amount, less such sum as might be required to pay interest on our loans, and freights on our ocean carriage.

The countries which, we are told by Prof. Perry, can not buy from us, except as we buy from them, buy from us exactly two dollars' worth of our produce where we buy one of their merchandise.

On the other hand, the countries from which we import more than we export to them, are Italy, China, Japan, British Indies, Dutch East Indies, Cuba, Porto Rico, Dutch West Indies, Central America, Venezuela, Brazil, Uruguay, and the Argentine Republic. To all these countries our mean exports, averaged, for 1880 and 1881, were $50,259,064 per year. Our mean imports from them during the two years were $216,471,440 per year. This left a net annual balance of trade against us during these two years of $166,112,376, which would have been an actual balance of trade against us had it not been canceled by our balance of trade with Europe, leaving a net balance of trade with the world in our favor of about $210,000,000 a year. This, except so far as it was canceled by interest on the European loans to us and the freights on our ocean carriage, was the actual balance of trade in our favor for which we got a net increase in our national stock of coin.

The largest item in our free list is coffee, of which we import $56,784,391 per year, while England and most of the countries of Europe impose a duty on it. Brazil was considerably benefited by the removal of our duty on coffee. Prices here did not recede by the amount of the duty, when the duty was removed, as was expected, while the letter of the Rio Janeiro correspondent of the *Commercial Bulletin*, of Boston, September 30, 1880, declares that the prices went up in Rio Janeiro simultaneously with the removal of the American duty.

Notwithstanding we give Brazil perfect free trade in coffee,

while England charges a heavy duty upon it, yet Brazil buys only $9,057,749 of our merchandise, while we buy from her $50,051,955. We would buy about the same amount of her products if the Brazilians did not buy a pennyworth of ours. The American merchants who import coffee from Brazil have no connection of acquaintance, sympathy, or interest with the American merchants who send our products to Brazil. The persons and firms in the import trade do not even know, as a rule, of the existence of an export trade as a fact bearing on their own business, except as it may affect rates of exchange and freights. Of a total of $140,670,021 of imports from China, Japan, British India, East Indies, Central America, Venezuela, Brazil, Uruguay, Argentine Republic, and Dutch West Indies there were only duties on $24,191,450, the remainder being on the free list. And yet Americans export to all these countries only $30,746,244 to offset an importation of $140,670,021. Eleven-fourteenths of our purchases from these countries are paid for by shipments of merchandise, chiefly manufactures from Europe, which we in turn pay Europe for with our surplus of exports of food and cotton to Europe over imports of goods from Europe.

It is the three-cornered character of the world's international trade, which gives so important a position, financially, to London, as its center. Its adjustments are made by means of bills of exchange, almost wholly without the use of coins. So far from any principle of barter entering into it, as between the aggregate populations of two nations, barter cuts an infinitely less figure in it than it does in the ordinary purchase of merchandise in cities. Whoever should try the experiment, therefore, of inducing one of our retail dry goods merchants to accept a "load of pumpkins," or a fat hog, in exchange for a silk dress or a camel's hair shawl, would appreciate how supremely ridiculous is the assertion that international trade is carried on by barter, either in appearance or in effect. The difficulty, of trading a fat hog for a silk dress would certainly not be removed if the owner of the hog resided in one country and the owner of the silk dress in another. And yet this economic error that international trade is conducted by barter, instead of by money, has a wide following among those who suppose themselves to have given some attention to political economy.

The fact that the aggregate quantities of goods bought by a nation equal the quantities sold, and that the bills drawn against goods sold are set off against those drawn for goods purchased,

does not convert the whole into barter, or exchange of goods for goods.

210. The Theory of Barter does Not Aid the Free-Trade Criticism.—To suppose that international trade is in effect barter, when logically traced to its conclusions becomes only the most formidable of all objections to the free-trade criticism. For free trade is always a mere criticism and never an actual practice between nations. If, however, it were true that international trade were barter, and that England were prepared to give us actual free trade, it would still devolve upon us to consider whether we could barter our crops for manufactured products as profitably in dealing with English as with home manufacturers. To all barter with foreign producers, the cost of transportation operates as a restriction and prohibition on all bulky and stationary products, limiting our capacity to barter, not according to the scale of our entire capacity to produce, but strictly according to the scale of our capacity to produce commodities which are highly transportable, *i.e.*, which combine great value and much labor with small bulk. The only agricultural products which do this are wheat, cotton, preserved meats, and fruits, rice, tea, coffee, and a few others of which we can produce cheaply only the first three. In barter with European producers our hay, straw, wool, building stone, ice, heavy lumber, land, labor, fresh meats, live stock, vegetables, farm and garden fruits, indeed thirty-nine fortieths of our agricultural products are wholly unavailable, directly or indirectly, because like products can be obtained by foreign producers nearer to their own homes, and usually at their very doors. Hence when we translate commerce into a barter of commodity for commodity, instead of a sale of commodities for money of account, a powerful objection to buying abroad that which we can produce at home arises in the fact that, at home, we can barter for it thirty-nine fortieths * of all the bulky products a new country is capable of producing, while abroad we can barter for it only such commodities as will stand transportation, viz., one-fortieth of the agricultural products which the land will produce.

In this sense the trade between producers of bulky products of small value, and that between producers of small products of great value, can never be made free, in fact, or equal. For the former are oppressed by a transportation tax which keeps their

* American exports are usually less than one-fortieth of American products.

products at home in any event, while the latter can send their product to the antipodes at a cost which hardly diminishes perceptibly the profits.

211. Private, Special, and Public Interests.—A favorite position of free traders is that protection is brought about through the influence of special and private interests. Prof. H. C. Adams, of Michigan, in referring to the claim that petitions for the adoption of a protective policy have at various times influenced Congress, says: * "Government by petition is government by special interests, and for that reason one must be very careful in accepting requests for special legislation as evidense of public sentiment." Does Prof. Adams hold that there is or can be any such thing as a "general interest," which will not arise out of the interest the general public take in a matter which is primarily of special, local, or private interest? We know of none. The taking of human life was at first regarded as of special interest to the person whose life was taken, and to those dependent upon him. It interested others only so far as they chose to take an interest in it. When Cain was asked, "Where is Abel?" his answer, "Am I my brother's keeper?" is equivalent to saying, "That is a matter merely of private interest." If the State of Maine were invaded by a public enemy, the affair would be, physically, a matter of private interest only to people in the route of the invading army. It would be only a matter of public interest, to those of the public who were sufficiently charged with the national feeling, to take an interest in it. When the Southern States seceded, a few attempted to say: "That is only a fight between the abolitionists and the slave-holders. It does not interest the people generally, or me in particular." The defence of life, liberty, and property are assailed. Their translation into matters of public interest depends not on their intrinsic quality, but on the degree in which the public is charged with the disposition to be interested in it. All matters of public interest, therefore, are mere matters of private interest publicly considered. Hence to ask that the public, generally, shall decline to consider a matter which primarily affects a private interest, is in effect to abolish the whole sphere of public interests, by eliminating from it every one of the matters now included under its consideration.

But is it true that free trade, as that term has been currently used, covers any less a class interest or private interest than pro-

* "Taxation in the United States, 1789 to 1816," p. 33.

tection? All political and social economy has to do with questions which are in their first instance of private and special interest, *i.e.*, they must affect individuals, and through individuals only the public. A danger which could affect all parts of the country and all classes of the people, at once and equally, might possibly be found in a collision of the earth with some other celestial body, but no such phenomenon comes within the domain of human government.*

In America the free-trade criticism has centered in the importing class as definitely as, in England, it has emanated from the manufacturers. Petitions have been printed, lobbies have been supported, journals have been founded and subsidized, and free-trade leagues have been formed through a stimulus invariably inspired from New York city, and having its seat and motive in the temporary increase of profits which would accrue to the importing class if reduction in duties on competing articles could be effected. Though the utterance has been in the name of the consumer, the oration has almost invariably been inspired or paid for by the importer. The publication by the New York *Tribune* in 1868–70 of the lists of contributors to the funds of the Free Trade League showed that the money which ran the league was contributed by persons directly interested in the business of importing, or foreign manufacturing, and by no others. That league circulated extensively, through the American News Company, a sheet entitled the People's Pictorial Taxpayer, purporting to illustrate, by various cartoons and pictures, the baleful effects of levying a tax on such foreign products as compete with our own. Its arguments were surrounded by the cards of Wm. Jessup & Sons, manufacturers of steel and importers of iron, Sheffield, England; of Congreve and Son, of New York, agents of the Toledo Steel-works of Sheffield, England; of A. B. Sands & Co., importers of drugs, one of whose members, Mahlon Sands, served the Free Trade League disinterestedly as secretary; of John Clark, Jr., & Co., foreign manufacturers of spool cotton; of Van Wart & McCoy, the New York agents

* Richard Cobden, addressing the people of Manchester in favor of free trade, October 9, 1843 (Speeches, p. 49), said: "I am afraid, if we must confess the truth, that most of us entered upon this struggle with the belief that we had some distinct class interest in the question, and that we should carry it by a manifestation of our will in this district against the will and consent of other portions of the community. I believe that is our impression." On page 52 he says they were told "that our object is to bring agricultural laborers into the manufacturing districts in order to reduce wages there."

of Van Wart, Son & Co., of Birmingham, and of a dozen other English manufacturing firms; of F. W. Harrold, hardware, Birmingham, England; of Sampson & Bro., importers of foreign iron; W. & G. Dutcher, of Sheffield, England, file and tool manufacturers; of Spear & Jackson, of Sheffield, England, steel saw-makers; and of Wm. Irving, of New York, agent for two foreign cutlery and edge-tool firms; and of Wm. Schiefflin, importer of drugs. Besides these there were the cards of several foreign insurance companies, but not of a single American producer of any kind. If it were not that the importers in many cases share largely the burden of the duties, foreign houses would not so usually establish agencies in New York on purpose to evade duties. What evidence, for instance, would a consignment from Jones, Robinson & Co., of Birmingham, England, to Robinson, Jones & Co. (the same parties) in New York, afford of the actual prices of the consigned goods, if a true statement of their foreign prices involved the payment of fifty per cent. duties, while an under-statement involved the payment of less? Mr. David A. Wells, in one of his reports, states that many of these American agencies of English firms are established on purpose to evade the revenue, and that in many lines of goods their smuggling almost defeats the collection of the duties. The Committee of Congress on Manufactures reports that the smuggling and evasion of duties by false invoicing, through the English consignors and American consignees being one firm or partner or agents of each other, amounts to twenty per cent. of the fair duties. The effort to enlist American farmers and citizens, generally, in the free-trade movement, has hitherto been conducted with as little spontaneous native aid, and by methods as distinctly foreign, as the effort to promote the importation of opium into China or the spread of Christianity in Turkey. It finds some advantage in the fact that we take strongly to English fashions wherever they are admissible. The free-trade criticism seizes upon many points of attack, some of which must at times present an appearance of plausibility on a superficial examination. Its economic statements, however, without a solitary exception, all rest finally upon falsehood, either of fact or of inference, or grow out of the tendency to mistake protection in a disguised form for free trade. It remains a criticism, not a policy. A policy succeeds when it accomplishes desired results. A criticism may succeed in merely obstructing a policy. Protection stands as the sole policy of nations,

212. Protection Universal.—"Free foreign trade" is, on its face, a term of complaint, which implies the pre-existence of some legislative policy which is charged with restricting foreign trade. The argument between tariff protection and free foreign trade, therefore, opens with protection in possession, *i. e.*, embodied in the statutes and jurisprudence of the following nations, viz.:

	Population.
The United States of America	62,000,000
France	42,000,000
Germany	42,000,000
Austro-Hungary	42,000,000
Russia	90,000,000
Italy	28,000,000
Spain	18,000,000
English Colonies	9,000,000
Total	333,000,000 *

Free foreign trade (so called) has dominated England for only forty years, out of the three hundred and fifty years in which England has had an international trade. During these forty years, the proportion of revenue, collected by duties on foreign trade in England, has been greater than in any other country, except the United States. Fully half the amount of revenue collected by England is, as we have seen, protective of the domestic manufacturer (of tobacco, gold leaf, and the like), and peremptorily destructive to the producer of domestic leaf tobacco. A tariff which forbids one industry, and protects another by a duty whose strictly protective portion is three or four-fold the value in foreign countries of the article on which it rests, is very far from being a non-interference with industry.

Protection holds that "possession" of all countries, which is "nine points" not only in law but in logic. This universality of protection proves it to be a "natural" element in government—just as profit is in trade. With the same readiness with which we would predict that "given two producers, each of whom has a surplus of what the other needs, they will trade," so we may also affirm that, "given two nations, whose people trade with

* If to these we add the nations which would gladly enact protective tariffs if permitted by English bayonets to do so, the list would be doubled by the addition of China, Japan, and India. And if to these we add those countries the chief part of whose commercial ascendency was won under and through protective policies, it would add the Netherlands and Great Britain. If we add those which still practice partial tariff protection to home industry and armed military protection to foreign trade, Great Britain would stand chief and *facile princeps* among protective nations,

each other in competing commodities, each nation will seek, by duties, to protect its own producers in its own markets, to the extent of deriving a revenue from taxes on the importation of the commodities of their rivals." Protective tariffs between nations whose manufacturers, traders, farmers, or other producers compete, are as natural as trade itself is between persons or nations whose productions differ. A free foreign trader can only, with the same logic, charge a protectionist with obstructing the natural laws of trade, as a protectionist can charge every free trader with seeking to obstruct the natural principles of government. The uniform action of all other nations in levying protective tariffs, sustained by nine-tenths of the record of Great Britain herself, proves "protection" to be as natural, inevitable, and necessary an element, in government, as exchange is in Industry. On a question of this kind the universal man knows more than the one man, and universal usage establishes natural law. Just as it is a law of nature that all governments shall practice coercion towards the disobedient, and that all peoples shall render homage to those in power, so is it a law of nature that all nations, whose people have international trade in competing merchandise, shall protect their own people by discriminating duties. They have always done so, and they always will. None should be so grateful to them for doing so as those whose function is criticism, since if it were possible that governments could cease to levy protective tariffs, the function of those economists, who reduce criticism or fault-finding to a system, would, so far as this question is concerned, be gone. Those who live by finding fault, like those who live by finding diamonds, should be grateful for what they find.

This chapter should have made apparent to the student the distinction between criticism as a force in society, and Policy, Action, Human Nature, or whatsoever we choose to call the existing and governing social forces. The enactment of protective statutes represent the latter, the clamor of free-trade pedants and theorists for the abolition of these statutes the former.

Protection is the mountain. It is eternal. Free trade is the mirage. If it advances it dissolves. It can only make with protection the same kind of an issue as the non-existing and impossible makes with the universal, natural, and inevitable. It is a fight between something and nothing. Protection is an economy; free trade is a give-away, a waste. Protection is constructive; free trade is destructive. Free trade may be talked,

while one is out of office. Protection must be practiced, the instant one comes into office, or inevitable disaster ensues.

Protection investigates, consults, harmonizes, unites. Free trade disintegrates, divides, slanders, besmirches, and disorganizes. Protection collects facts. Free trade is oracular, pompous, and issues dogmas. This chapter opened with several refreshing extracts from free-trade criticisms. It closes with a note containing the overweening criticism, by an English manufacturer, of great wealth, eloquence, and social power, upon the stupidity of Americans, in pursuing that policy which, in England, renders a John Bright possible.* The silent but effective answer to Mr. Bright's urgency that Congress should be "wise and righteous" is found in the practical illustration which British free trade affords of wisdom and righteousness, in its career at home and in India, Ireland, Turkey, China, and Japan. If Americans had 600,000,000 of barbarians where we could train our guns upon them, if they demanded the right to trade with their countrymen in preference to buying of ourselves, then we too might aspire to teach "wisdom and righteousness" in the English way. In the absence of these barbarian aids, we have to be quite humble. British righteousness and British wisdom, both of which blend in British free trade, are beyond our present reach.

---

* Mr. L. U. Reavis of St. Louis recently received from Rt. Hon. John Bright of England the following letter:

ONE ASH, ROCHDALE, Feb. 6, 1888.

DEAR SIR: . . . . As to the disputes between labor and capital, surely your monstrous tariff provokes, if it does not justify, your strikes and labor insurrections.

If your Congress insists on burdening your whole population to give profit to your manufacturers, surely the workmen may as justly insist on protection to their labor.

Whilst your tariff is in force you need not expect your workmen to be wise. Protection, which means robbing somebody, will not content itself with enriching manufacturers, but will be called in to give higher wages and shorter hours of labor to your workmen.

Congress should become wise and righteous, before it can expect the artisans and laboring classes to make progress in that direction.

Yours very truly,

JOHN BRIGHT.

MR. L. U. REAVIS, St. Louis, Mo., U. S. America.

CHAPTER XV.

Economy of Protection.

213. How a Tariff May Protect Producers.

DUTIES ON IMPORTS MAY PROTECT THE PRODUCERS, TRADERS, TRANSPORTERS, BANKERS, LAND-OWNERS AND LABORERS OF THE COUNTRY, IMPOSING THE DUTIES IN FIVE WAYS, WHICH ARE THE FIVE POINTS OF PROTECTION, VIZ.: FIRST, WHEN, WITHOUT RAISING THE PRICE OF THE ARTICLE, THEY SHUT OUT IN WHOLE OR IN PART THE FOREIGN COMPETING ARTICLE, THEREBY SECURING TO DOMESTIC PRODUCERS THE EXCLUSIVE RIGHT TO SUPPLY THE ARTICLE TO DOMESTIC CONSUMERS.

This occurs when the article is so largely produced at home that domestic producers are fully competent to supply it at as low prices as it can be imported, yet would lose a portion of their market if free competition from abroad were allowed. As the cheapness with which an article can be marketed often depends on the certainty of a market, it is obvious that this class of duties, by insuring to American producers a certain market, tends immediately and in the first instance to cheapness. The test of the cheapness of the American market relatively to the foreign is found in our ability to export, since no article will go abroad except to obtain a price higher, by cost and profits of transportation, than it can find at home.

The following schedules of protected articles which we both export and import shows how large is the volume of merchandise, the duties upon which do not enchance the price in the American market. Yet they protect that market, containing 63,000,000 customers, to American producers, absolutely as to the portion of foreign goods excluded by these dutes, and relatively as to the portion admitted. Since, by the terms of the proposition, the American price is the same or lower than the foreign, the whole duty on competing goods must be paid by the foreign competing producers.

Protected Products which we export.	Value of Exports.	To how many countries exported.....	Duty on Importation.
Implements of iron, steel, and wood (agricultural)	$2,976,371	48	45 per cent.
Pot and pearl ash.....	31,362	14	20 per cent. to 3 cents per lb.
Tanning bark	97,442	12	Raw, free ; ext., 20 per cent.
Beer, ale, and porter.....	384,196	41	20 to 35 cents per gal.
Bells and bronze.....	26,377	17	3 cents per lb.
Billiard-tables.....	42,095	22	35 per cent.
Blacking.....	187,403	44	25 per cent.
Books.....	831,132	47	25 per cent.
Brass and manufactures..	322,439	39	1½ cents per lb. to 45 per cent.
Bread and breadstuffs....	182,670,528	68	20 cents per bushel to 20 per cent.
Bricks..	50,870	12	20 per cent.
Brooms and brushes.....	241,403	50	25 to 30 per cent.
Candles	226,687	39	20 per cent.
Carriages, carts, etc.....	1,439,003	50	35 per cent.
Cars (railroad).....	1,393,059	18	35 per cent.
Clocks....	1,402,362	53	30 per cent.
Coffee and spices	93,390	44	Free to 20 cents per lb.
Coal.....	3,692,785	29	Free to 75 cents per ton.
Combs...	18,622	14	30 per cent.
Copper and manufactures	658,941	34	2½ to 4 cents per lb. to 35 per cent.
Cotton goods...	13,222,979	56	10 cents per lb. to 40 per cent.
Drugs and medicines.....	3,517,149	59	Free to 10 per cent. to 25 per cent.
Dyestuffs...	929,929	32	10 per cent.
Earthen, stone, and china ware	180,773	45	25 per cent. to 60 per cent.
Fancy articles....	852,130	49	Average 40 per cent.
Fruits.....	1,750,398	48	Average 40 per cent.
Furs and fur-skins.....	4,747,944	9	Free to 30 per cent.
Gas-fixtures.....	30,862	18	45 per cent.
Ginseng....	483,171	2	Free to 25 to 50 per cent.
Glass and glassware. ...	864,235	52	Average 45 per cent.
Glue...	46,274	25	20 per cent.
Hair	307,133	24	25 to 35 per cent.
Hats, caps, and bonnets..	275,904	28	20 to 30 per cent.
Hay.....	190,175	29	$2 per ton.
Hemp and manufactures.	735,893	47	$10 per ton to 40 per cent.
Hides and skins.....	1,499,737	30	Raw, free ; dressed, 20 per cent.
Hops...	1,456,786	30	8 cents per lb.
India-rubber goods.....	510,716	47	25 to 30 per cent.
Iron and steel wares.....	17,571,332	68	Average 40 per cent.
Jewelry....	303,245	35	25 per cent.
Lamps.....	350,009	47	40 per cent.
Lead wares	178,779	30	2 to 3 cents per lb.
Leather and m'ufactures	8,999,627	55	15 to 30 per cent.
Lime and cement.....	100,169	35	10 per cent.
Matches....	161,466	36	35 per cent.
Mathematical ins'ments..	599,397	37	35 per cent.
Musical instruments.....	1,267,450	39	25 per cent.
Naval stores.	3,370,307	53	20 per cent.
Oils of all kinds.....	53,279,632	68	25 per cent.
Powder and ball.....	909,755	45	6 to 10 cents per lb.
Paints and colors.....	424,991	49	3 cents per lb.
Paintings and engravings	406,153	35	25 per cent.
Paper and stationery.. .	1,618,883	53	15 to 25 per cent.
Perfumery	285,000	47	50 per cent.
Plated ware.....	396,595	47	35 per cent.
Printing presses and type	211,292	42	45 per cent.
Provisions (bacon, hams, fresh and salt beef, butter, cheese, milk, eggs, fish, lard, mutton, oysters, pickles, sauces, pork, onions, potatoes).	117,765,471	88	20 to 40 per cent.

Protected Products which we export.	*Value of Exports.*	*To how many countries exported.*	*Duty on Importation.*
Quicksilver	959,128	15	10 per cent.
Rags	11,000	2	10 per cent.
Rice	10,109	17	1½ to 2¼ cents per lb.
Salt	18,265	21	8 to 12 cents per cwt.
Scales and balances	304,446	45	2½ cents per lb.
Seed, hay and cotton	4,219,600	16	20 per cent.
Sewing-machines	2,647,515	50	45 per cent.
Soap	667,993	46	20 per cent.
Spirits	1,989,038	47	$2 per gal.
Starch	361,471	40	2 cents per lb.
Sugar and molasses, chiefly refined	1,872,182	51	1 4-10 to 2½ cts. per lb.; 4 to 8 cts. per gal.
Tallow	4,015,798	41	1 cent per lb.
Tin wares	198,608	48	1 to 2 cents per lb.
Tobacco, cigars, etc	21,430,869	54	15 cents to $1 per lb.
Trunks and valises	192,952	43	30 per cent.
Umbrellas and parasols	2,025	11	35 per cent.
Varnish	187,000	39	40 per cent.
Vessels and steamers	90,213	7	20 to 40 per cent.
Vinegar	9,846	29	7½ cents per gal.
Watches	121,470	18	25 per cent.
Wax	32,325	17	20 per cent.
Wearing apparel	695,398	48	Average 35 per cent. and 35 cents per lb.
Wine	67,000	32	5 cents per pint to $2.25 per gal.
Wood, lumb'r, timb'r, etc.	24,011,228	60	20 to 40 per cent.
Wool and woolens	445,431	33	13 cents to 50 cents per lb.
Zinc	124,648	14	¼ cent to 2½ cents per lb.
Unmanufactured articles not mentioned	1,013,900	37	Average 40 per cent.
Manufactured articles not mentioned	5,421,529	46	Average 40 per cent.
Total	$702,777,091		

In certain of these articles, viz., sugar and molasses, iron and steel, wearing apparel and woolens, we import the crude article in a form in which it needs further manufacture, and export the products of the same article in a more finished form. In such cases the crude article bears a higher price, and the more finished article as low (or lower) a price, as in foreign countries. This is specially true of crude iron and steel, relatively to the implements made from them.

American manufacturers of wares pay the whole duty on imported pig, scrap, and bar iron, and yet sell the finished products made of them, both here and in all foreign countries, as low as their foreign competitors. An acute free trader, Mr. Thomas G. Shearman, issued to the American manufacturers a tract explaining to them that, including the manufacturers of railroads, they, as a class, pay 97 to 99 per cent. of all the duties paid on imported products. The manufacturers, however, passed the tract over to the farmers as a means of correcting the statement, so fre-

quently made by the less candid free traders, that the farmers pay the whole duty. On the whole, it was found that Mr. Shearman's address to the manufacturers was too strong meat for the free-trade propagandism. It was deemed safer to return to the "sincere milk of the word," viz., that manufacturers are the cormorants, and those who buy no goods (except, at times, sugar) that are increased in price by the duty are their victims.

214. When Duties on Imports Protect from Taxation.

DUTIES ARE PROTECTIVE WHEN, BY COLLECTING A REVENUE FROM IMPORTERS, WITHOUT INCREASE OF PRICE ON THE THING IMPORTED, THEY SAVE THE BODY OF AMERICAN TAXPAYERS FROM TAXATION.

Duties on imports operate protectively, in behalf of the whole body of the taxpayers of the country imposing them, when, without increasing the price of the commodity on which they rest, and hence without operating as a tax on American consumers in any degree whatever, they collect a considerable revenue out of the foreign producers and importers of competing products, thereby shielding the body of American taxpayers from taxation to the extent of the sum so collected. Such duties may perform the double function of protecting our body of taxpayers against a given sum of taxation, and protecting certain groups of domestic producers in a portion of the domestic markets. Each mode of protection ends exactly where the other begins, *i.e.*, on the goods admitted we get a revenue paid by foreigners, which is a form of protection to our taxpayers against taxation. To the extent of the goods which would come in but for the duty, but are excluded by the duty, we get no revenue, but an exclusive market for domestic producers, instead of a market divided between them and foreign producers. Both these results being, in the cases supposed, without increase of cost to consumers, the duty, as to consumers, is not a tax. In short, while free trade divides our American markets between our producers and the foreign, and leaves us to pay the entire duties, protection divides the burden of paying the duties between American producers and the foreign, and leaves the former to enjoy the whole American market.

SCHEDULE OF DUTIES WHICH CAN NOT BE CHARGED OVER WHOLLY ON CONSUMERS.

Below is a schedule of articles which we both export and

import, and which, therefore, must preserve very nearly like values at home and abroad. I do not say exactly like values, but I affirm that the values can not vary much, since the grades we export under each name must be enough higher abroad than here to pay for exportation, and the grades we import must be producible, enough cheaper abroad than here, so that when the foreign producer has added his share of the duty to the cost of his production, he will still usually have a margin of profit. But if one grade of a given article is higher priced here than abroad, while another grade of the same article is lower priced, both and all grades of that article can not keep very far from equivalent values in the two countries.

In the case of every article included in this schedule, there arises an irresistible presumption from the fact that the article is in some form and degree one of export, that prices being about at a level in the two countries, a very considerable portion, or the whole of the duty, is paid by the foreign producer. That presumption needs, however, to be tested in each case, in conformity with a principle which will be stated and if proved, furnish a substantial proximate rule, more accurate than has hitherto been in use, for calculating the portion of revenue paid by foreigners.

The following is the schedule :

Articles which we both Export and Import.	*Imports.* 1882.	*Revenue.* 1882.
Beer, ale, and porter	$937,806.59	$417,202.09
Books, blank-books, and music	3,002,696.76	745,402.30
Brass (manufactured)	668,136.35	180,315.87
Breadstuffs, grain, and rice	16,478,596.33	4,152,827.36
Bricks and tiles	153,033.33	34,765.99
Bristles, brushes, and brooms	1,547,813.29	330,976.14
Candles and tapers	6,678.00	1,586.93
Carriages, and parts of	140,422.57	49,174.92
Chemicals, drugs, and medicines	14,161,115.97	4,981,453.14
Clocks, watches, and parts of	3,039,647.97	804,483.89
Coal	2,192,689.23	621,099.25
Coke	53,244.03	13,311.01
Cocoa, coffee, and substitutes for	60,615.50	4,026.96
Copper, chiefly crude	317,172.34	109,496.50
Cotton goods	31,285,306.49	12,227,103.04
China and earthenware	6,873,075.95	2,965,978.84
Fancy articles	9,654,978.88	3,913,245.05
Fish (exports $4,187,338)	1,332,017.37	414,915.63
Fruits and nuts	18,047,937.22	4,427,135.45
Furs and manufactures of	5,216 333.19	1,135,129.91
Glass " "	6,753,537.11	3,847,28.661
Hair " "	831,085.32	228,317.91
Hats, bonnets, and hoods	1,026,248.77	413,211.41
Hay	891,520.35	153,196.07
Hemp and manufactures of	12,382,386.48	2,414,080.50
Hides and skins	27,702,970.61	4,992.00

Articles which we both Export and Import.	*Imports.* 1882.	*Revenues.* 1882.
Hops	288,344.00	69,964.64
India-rubber goods	300,445.65	97,293 65
Iron and steel, and manufactures of	53,998.266.74	24,196,037.62
Jewelry (not in diamonds and watches)	398,796.44	99,862.22
Lead, and manufactures of	211,934.99	126,301.70
Leather " "	12,215,203.48	3,794,564.62
Lime	36,878.99	3,687.90
Marble (exports $614,400)	575,144.60	354,165.54
Matches	2,233.95	781.88
Metals, bronze, German silver, nickel, platina, britannia, etc	1,429,918.17	425,188.24
Musical instruments	1,514,762.43	455,040.02
Oils, Mineral, etc	29,625.00	6,001.00
Animal	102,873.18	21,157.23
Vegetable, fixed	868,201.58	389,800.56
" volatile	300,975.77	98,186.60
Gunpowder and fulminates	23,822.25	9,542.08
Paints and colors	1,217.407.35	411,331.52
Painting and statuary	2,574,815.91	262,270.86
Paper, pulp, and manufactures of	2,011,645.21	689,041.32
Pens and pencils	209,909.73	129,685.94
Perfumeries	500,867.08	302,415.57
Pickles, capers, and sauces (exports $25,635)	350,444.22	122,673.03
Potatoes	4,656,368.50	1,318,246.35
Provisions (bacon, beef, butter, cheese, eggs, lard, meats, milk, etc)	2,046,533.27	434,545.34
Saddlery	157,565.09	55,147.78
Salt	1,561,131.74	715.243.13
Sand	23,640.00	2,364.00
Seeds (flax, hemp, garden, etc)	1.455,175.18	281,696.24
Soap	316,061.49	143,495.45
Spirits and wines	9,453,593.49	6,789,023.04
Starch	82,672.68	73,276.28
Stone, other than marble	223,397.96	52,192.83
Straw	41,683.37	13,477.57
Sugar and molasses	94,523,797.29	49,216,335.56
Tallow	6,469.50	733.05
Tar and pitch	27,608.75	5,521.77
Tin cans and manufactures		67,681.34
Tobacco, cigars, etc	8,216,132.12	6,047,560.09
Umbrellas, parasols, and materials	83,354.00	41,628.60
Varnish	112,781.29	52,759.24
Vegetables	1,182,203.60	223.006 96
Vinegar	26,030.60	11,342.39
Wax	6,455.95	1,421.00
Wood, lumber, timber, etc	8,967,290.69	1,697,431.91
Wool	10,333,358.54	3,856,678.06
Woolen manufactures	37,284,823.88	25,439,102.52
Zinc	949,041.92	377,159.01
Total	$415,759,545.00	$174,562,630.98

It appears, therefore, that out of the total of $505,491,966.66 of imported goods paying duties in 1882, four-fifths, or $415,759,-545, are goods, some forms and grades of which we export to the amount in all of about $700,000,000, which was shown by the first schedule to be the amount of our protected exports; also, that out of a total of $215,617,669.62 of revenue collected on imports, an irresistible presumption arises that a like proportion of four-fifths, viz., $174,562,630.98, is either not chargeable over upon American consumers at all, or

is divided so that a definite and large portion of it is not so chargeable.

IN CASES WHEREIN THE IMPORTATION DISPLACES A PORTION OF AN ALREADY SUPERABUNDANT SUPPLY THE FOREIGN PRODUCER PAYS THE WHOLE DUTY.

Among the articles, on which the duty is not chargeable on the American consumer in any degree whatever, are breadstuffs, coal, fish, hay, paper, potatoes, provisions, sand, starch, stone, straw, tallow, tar, and pitch, vegetables, vinegar, and wood, lumber, and timber. In breadstuffs the import for 1882 was $16,478,596.33, almost exactly one-hundredth as much as our domestic production, which for 1881 (short crop) was worth $1,570,248,541, and one-eleventh as much as our exports, viz., $182,670,528. The American price was fixed by the ratio of the whole demand upon America, foreign and domestic, to the whole available supply. If European sources of supply and demand are included, the driblet from Canada which constitutes our importation would be one part in 250. If American sources only are counted it would be one part in 100. But when we are sending abroad eleven times as much breadstuffs as we import from Canada, it is obvious that the importation from Canada simply displaces its equivalent in American breadstuffs, increasing by so much our national surplus for export. Hence Canada, being nearer the point of demand than our far West producers, lessens by so much the quantity of American produce that can find market. The degree in which it lessens the quantity of our own far West breadstuffs, that can profitably be marketed, exactly offsets the addition it makes to our exports. It is like a pint of water, poured into a barrel of water that is already running over. It effects no change of level, nor increase in quantity, but only a substitution of atoms in an unchangeable quantity.

Plainly the import of breadstuffs from Canada exerts no influence whatever over the American price, but merely displaces part of our American product, partly by lessening the quantity marketed, and partly by increasing the quantity exported.

A Canadian can not, on bringing his wheat into our market, if our wheat is selling at $1.25, say : "I want $1.45 for this wheat, because I had to pay twenty cents a bushel import duty." He must sell for the American price. He need take no less, and he can get no more. Hence, if he pays a duty, it figures merely as an additional item in his cost of production, *i. e.*, a deduction

from his profits, just as if it were a sum paid for phosphates or manure.

The opposite theory would involve the absurd corollary that all the breadstuffs produced in the United States, though one hundred times as great in quantity as the trifles imported from Canada, must have been made twenty per cent. higher by the mere duty on this importation from Canada, or that a tax of $312,000,000 could be imposed on consumers of American breadstuffs, and paid over to American farmers, as the consequence of collecting a twenty-five per cent. duty on $16,000,000 worth of breadstuffs coming in from Canada and going out to Europe.

Hence, we have to admit that the whole duty collected on breadstuffs, entering the United States from Canada, is paid by the Canadians. Here, therefore, is a saving to the whole body of American taxpayers of $4,152,827.36 per year, through the duty on imported breadstuffs. No American resident, citizen, or taxpayer pays one cent of this revenue in the form of increased price. Yet, as the Canadian is seen to pay it into the Treasury, it is necessary to prove that the American price is increased by the amount of the duty, in order to escape the conclusion that the Canadian sustains the final burden of the tax.

Of coal, we import $2,192,689.23 worth, against an export twice as large, and against a production of $94,287,923. Every ton imported is, therefore, a displacement of a portion of domestic product, partly by diminishing the quantity of the latter which can be profitably marketed, and partly by compelling a portion of the latter to be exported. Neither of the processes tends to lower or raise the price, since in both cases the importation only displaces a portion of the domestic supply without increasing the aggregate supply. By so much as the importation from Nova Scotia is more, the domestic product will be less. All the facts, which make the duty on breadstuffs a collection of revenue exclusively from foreign producers, apply to coal. Hence, of the $621,099.25 annually collected on coal not one cent is collected from American consumers of coal.

Lumber and manufactures of wood are exported from the Northwest, *i. e.*, from Michigan, Wisconsin, and Minnesota, into Western Canada and Manitoba, to the amount of $2,475,636 annually, thus showing that it is cheaper in the Northwest than in any part of Canada. It is imported from the Ottawa district of Canada into New York and New England to the amount of $8,967,290.60, thus showing that it is dearer in New York and

New England than in most parts of Canada. Finally, we ship from our ocean ports upwards of $24,000,000 worth to foreign countries. The total value of our lumber product is $233,268,-729, or say thirty times as much as we import, and our importation is less than one-third of our export.

Here again the Canadian gets the American price ; his importation is a displacement, partly felt in diminishing our domestic product, and partly in increasing our export. Hence the $1,697,-431.91, collected from Canadian lumber producers, protects the body of our taxpayers from just so much tax which they would otherwise have to pay.

Summing up the revenue derived from the articles on which the importation serves clearly only to displace a small portion of our domestic production, partly by lessening the portion of our domestic product that can be profitably marketed and partly by forcing another portion to be exported, we find that on these several articles, viz., breadstuffs, coal, fish, hay, paper, potatoes, provisions, sand, starch, stone, straw, tallow, tar and pitch, tobacco, vegetables, vinegar, wood, lumber, etc., we collect duties from foreign producers to the amount of $15,919,878.03, apparently without a possibility of any tax on the American consumer.

215. When Protection Promotes Production.—The third class of cases, in which duties on imports operate protectively, is when, being imposed on articles of which the American production is inadequate to supply the American demand, they enhance the price sufficiently to stimulate the production up to a condition of adequacy to supply the demand. When this point of *adequacy* of domestic supply is reached, domestic prices will have fallen to a dead level with foreign prices. While the domestic production is rising toward this condition of adequacy, the enhanced price, or "tax" occasioned by the duty, lessens *pari passu* with the approach of the domestic production toward adequacy to supply the domestic demand. In no case, therefore, where there is a large domestic production, can the domestic price stand as high as the foreign price with the duty added.

If the law, by which the duty recedes from its full effect on the price, could be reduced to mathematical certainty, an exact count of the temporary cost of protective duties, and an account current of this cost against their profit in enhanced production and increased internal trade, could be arrived at.

But fluctuations in markets greatly embarrass it, and down to the present time the Government of the United States has neg-

lected to collect such statistics as would furnish most aid in establishing the universality of such a mathematical formula. It has to be left to sound business judgment.

Upon no point are the American people so ill-informed, and so subject to imposition on the part of the unscrupulous, as on that of the relative prices of consumable commodities of nearly all kinds in Europe and in America.

Subject to variations, which may be separately noted, the proximate law of the receding effect of duties under an increasing domestic production is that, *pari passu* as the domestic production becomes adequate to supply the demand, the tariff tax declines.

For instance, on crude sugar we import ten-elevenths of our supply. Presumptively, therefore, ten-elevenths of our duty, on the raw materials or forms of our sugar, falls as a taxation on our manufacturers and refiners of sugar. The existence of an export of refined sugar, though only to the extent of one-fiftieth in value of our importation of crude sugar, would suffice to prove that prices are as low in our markets as abroad, were it not that the export is aided by payment of a rebate of the duty collected on the importation of the crude sugar used in its manufacture. In fact, however, refined sugar has at times been lower in the United States than abroad, and is usually higher by only a third or half the duty. To this extent the tax is continued against our consumers. The assumption that raw sugar is taxed depends also, for its truth, on the condition that the repeal of our duty would cause no change in the tariff policy of the countries which sell us the sugar. If, however, they should put on an export tax simultaneously with our taking it off, as Brazil and China did on the occasion of the repeal of our duties on tea and coffee, then we would be simply presenting to foreign nations our present sugar duties, amounting to about $50,000,000 annually.

Collateral causes other than the tariff, such as patents, which limit the competition among domestic manufacturers, may conspire to prevent prices receding, under domestic competition, in the degree our rule calls for. The history of steel rails may illustrate. When they were altogether supplied from abroad, neither duties nor patent monopoly were much complained of. The price was so high that even the duty of $28.50 per ton was only equivalent to 20 per cent. ad valorem, though the fall in price so raised its ad valorem rate that had it continued it would have become a duty of 100 per cent. In 1864 as high as $375 in currency was paid for steel rails. In 1882 our demand had expanded to 1,912,921

tons annually, under reduced prices and expanded production, and we ourselves produced 1,688,794 tons a year, leaving only 224,057 tons to be imported. If the law of receding tax had worked unfettered, it should have resulted as follows:

Whole demand, 1,912,921 tons.	:	Deficit, 224,057 tons.	::	Whole duty, $28.50 per ton.	:	Tariff Tax, $3.16

In short, in 1882, in view of the ratio of our domestic production to our importations, the price of steel rails should have been only $3.16 per ton higher in America than in Europe, whereas it was from $15 to $18 higher, the duty being then $28.50 per ton. This failure of the price to recede, at an equal pace with the expansion in the domestic production, was due to the patents which limited the right to manufacture here to eleven companies, all acting under one arrangement as to their patents, and whose patents continued to run after the English patents had expired. Had there been no patent monopoly, *i. e.*, had all Americans been free to make Bessemer rails after 1870, it is probable that forty instead of eleven makers might have competed. In that case the American price might not have been higher than the foreign price by more than the ratio assigned, $3.16 per ton, plus freight and charges. Still the fact that America is the ultimate market, for consumption, of about as many rails as all the rest of the world combined, necessarily causes iron and steel rails to tend toward higher prices in America than elsewhere.

The duty recedes from its effect, as a tax, in proportion as the domestic production becomes adequate to supply the domestic demand. Hence the portion of the duty which is a tax on domestic consumers, bears always the same proportion to the share which is paid by foreign producers, as the deficit in the domestic supply bears to the whole domestic demand. If this law be applied to the foregoing schedule of duties, to the amount of $174,562,630.98, it will furnish us with the fairest standard for ascertaining the gross cost of protective duties, in the first instance, *i. e.*, before offsetting the profits which ensue to the country at large from enhanced production, and the increased prosperity of all kinds of industries. The problem which has excited the candid wonder of many ingenious persons is, Why, under protective duties, do we grow rich in just the degree that taxes are high? The secret of the puzzle is that foreign producers pay so large a share of the duties that American

consumers actually are presented in part with their imported commodities. This is, in part, why Chancellor Bismarck attributes the unwonted prosperity of America, during the twenty-three years past, to the only operative cause peculiar to that period, as compared to other periods, viz., our protective duties. It will also both explain and justify the fact that the last English work on political economy, by Professor Henry Sidgwick, of Cambridge University, says (p. 576): "*It must be admitted that the imposition of import duties is, under certain circumstances, a method at least temporarily effective of increasing a nation's income at the expense of foreigners.*"

In stating, as a proximate rule for estimating the decline in the tariff tax, which results from the advance in the domestic production, that, *pari passu* as the domestic production becomes adequate to supply the domestic demand, the tax declines, I use the word proximate in its broadest sense. For instance, while the American manufacture of silks now supplies the country with about one-fourth of the silk worn in this country, the deficit being still three-fourths, the rule above set forth would require that the current selling American price should be one-fourth of the duty below the French price with duty added, supposing the French price itself not to have been reduced by the American manufacture. In short, that the current American prices ought to be three-fourths only of the French price, plus the duty. This is not far from the fact. French manufacturers several years ago refused to fill American orders except through their New York houses. They alleged as the reason that, if they should sell to American customers at current French prices, the latter, on paying the duty, would find the American price so much lower than the French price with duty added, that they could not sell at all. This is only another mode of saying that the French producers of silks are paying a portion of our revenue. The formula I have given would fix that portion proximately at about a fourth of the price; which, if the duty be 60 per cent., would be two-thirds of the duty. The accidents of trade might cause this to fluctuate between a tenth and three-tenths, and differently on different kinds of silks, according to the degree in which our domestic manufacture is superseding the French, in each kind, in our markets. The actual law which determines the price being the ratio of the whole supply, foreign and domestic, to the whole demand, domestic and foreign, it follows that the recession of price must bear a permanent relation to this greater equation,

and only a subordinate relation to the less one of the ratio of the domestic to the foreign supply. Still, if a competent government investigation were made, I think it would prove that for several years past the American price for silks has been from one to three tenths below the French price and duty, thus, in effect, showing a payment by the French silk manufacturers of from two to four tenths of our revenue from silks.

English manufacturers of cutlery and crockery also make different price lists to American customers from those they sell at to Australian and to English, putting their product enough lower here than elsewhere, to virtually pay as much of the American duty as they can afford to pay, without losing their entire profit.

In crockery the proximate rule above given is borne out with essential accuracy. The American manufacture produces about $5,000,000 worth a year, as against an importation of about $7,000,000 worth. Our total annual consumption being $12,000,000, and our domestic production having become adequate to supply five-twelfths of the demand, it ought to be found that our foreign competitors are bearing five-twelfths of the tariff tax. As the effect of a duty is partly to raise prices in the country imposing it, but partly also to depress prices in the country producing the product on which it is imposed, a comparison of present relative prices in the two countries is not always more satisfactory than a comparison of present prices with past prices in the same country. Davenport & Bro., a New York importing house in crockery, china, and earthenware, report that in 1852 a crate of assorted crockery would sell to the American consumer at $95.30, under the 30 per cent. duty, and a like crate sold in 1883 under a 50 per cent. duty, at $57.80. The goods had sold 67 per cent. higher under a duty 40 per cent. lower. The books of Oscar Cheeseman, another importer and jobber of crockery in New York, show that assortments of crockery which sold for $108.68 in 1860 under a 24 per cent. duty sold in 1883 under a 50 per cent. duty, for $63.81. Although the duty has since been raised to 60 per cent., inquiry of these firms shows that the goods in question sell very much lower now than when these statements were made.

Nine heavy firms of dealers in plumbing and sanitary hardware in New York certified, in the winter of 1882, that the prices on their class of earthenware were 40 per cent. lower then than in 1872, when the business of their manufacture was first undertaken

in this country, though the currency in which these prices were stated was worth 33 per cent. more in coin in 1882 than in 1872. They say: "We are of the opinion that the manufacture of these goods here has been the main cause of this reduction, and also that the development of home manufacture has always the tendency to reduce prices to the consumer." In crockery, therefore, 40 per cent. increase in the duties has caused the American production to expand until it supplies five-twelfths of the American demand, and has reduced the net price to American consumers by a percentage greater than the whole duty. Without this reduction in price, the annual consumption for which we now pay $12,000,000 would have cost us $19,200,000, an annual saving of $7,200,000, which is more than the invoiced value of all that we import, viz. (for 1882), $6,873,075.95. In view of such facts, and of the fierce struggle made by foreign potters to hold the American market, it is safe to say that of the revenue collected on pottery, viz. $2,965,978.84, one-half has been paid by the importers, and only one-half by the American consumers.

Certain newspapers, in 1868–70, denounced the duty on paper as a tax on knowledge. The fear that knowledge was going to be taxed, so great was their stock on hand, naturally made them "fast and furious."

The tax on "knowledge" was continued, with the gratifying result that knowledge so increased, on all hands. that most of those who had not known that the duty on paper helps to make it cheap, instead of dear, found it out. The facts are, that the United States makes 535,000,000 pounds of paper annually,* while Great Britain makes only 350,000,000 pounds, so that our supply is slightly greater per capita than the English. They could only have more for export, than we, by using less. As recently as 1873, we imported foreign paper to the value of $580,000. In three years the importation fell to $20,000. At the same period our export, which in 1869 was only $3,650, grew, in seven years, to $810,000, and in 1882 was $1,618,883, while our imports of materials for making paper grew to $6,024,772.63. In paper, therefore, we became importers of the raw materials and exporters to fifty-one countries of the finished product of all grades, England being our largest purchaser, and the British possessions in Africa one of our smallest, because little paper is used there.

Since 1883 our imports of paper have gained slightly on our

* Census of 1880.

exports, but the domestic production is sixteen times greater than the importation. According to our formula, it is sixteen-fold more potential in securing permanently cheap paper. Though the paper manufacture maintains a larger supply, and in most grades at as low prices as the English, an assault along its lines under a system of low duties would shatter it in all its parts.

The conditions relating to hosiery and dress-goods, of all except the extremely expensive kinds, resemble those above outlined as to crockery. The revenue on these, therefore, is divided. Mr. Marshall Field, the leading importer and dry-goods merchant of Chicago, stated in 1882 that in all ordinary woolen and cotton goods, for common wear by the business men and working classes, the American market (though surrounded by an average 45 per cent. tariff) is the cheapest market in the world. Six-sevenths of the goods of this class consumed here are now made in America. Our cotton sheetings and cotton prints are selling in Manchester and Liverpool, as well as in every port on the globe. It does not follow that they are not helped by protection, for our duty secures to our cotton producers an exclusive American market, in addition to whatever foreign markets may be open to them. A large trade makes a low price.

If the principles above outlined be applied to our entire tariff list, it would show that, of the $212,000,000, or less, of duties on imports usually collected, the proportion collected from foreign producers and not chargeable over to American consumers varies with the fluctuations in the state of foreign and domestic prices, never coming below $40,000,000, and seldom, perhaps, rising above $60,000,000.

Few writers are more passionately British, or more dogmatically indifferent to facts, than Mr. Mill. By some fortuitous accident, however, he did make the discovery, which he thus candidly admits (vol. ii. p. 457): "Those are, therefore, in the right who maintain that taxes on imports are partly paid by foreigners." His application of the principle in practice shows less knowledge of the laws and conditions of trade than would be expected.

216. Protection Promotes Wages.

THE FOURTH MODE IN WHICH DUTIES ON IMPORTS OPERATE TO PROTECT THE INDUSTRIES OF THE COUNTRY IMPOSING THEM IS WHEN, BY INCREASING THE NUMBER OF OCCUPATIONS AND ENTERPRISES THAT CAN BE CARRIED ON WITHIN A COUNTRY TO

THE PROFIT OF THE MAN WHO RISKS HIS CAPITAL IN THEM (THE "ENTREPRENEUR"), THEY INCREASE THE FULLNESS AND DIVERSITY WITH WHICH THE NATURAL RESOURCES OF A COUNTRY ARE DEVELOPED AND USED, THEREBY CAUSING MORE EMPLOYERS TO COMPETE FOR THE HIRE OF LABOR, AND SO RAISING THE RATE OF WAGES, OR THE NUMBER OF WORKERS THAT CAN FIND WORK AT THAT RATE, OR BOTH.

I have shown that no duty can increase the price, if it rests on the importation of an article of which our domestic production is adequate to supply the demand. Such is the case of wheat. If the duty raises the price, without starting the domestic production, it is a revenue duty, since the whole duty paid goes to the treasury, and there are no domestic producers to protect. Such is the case of tea, and such, until recently, was that of silk goods. The duties which are protective are limited, therefore, to those which are stimulating a domestic production not yet adequate to supply the domestic demand. If there are fifty or five thousand such *that enhance prices*, that means that there are fifty or five thousand *new sets of employers competing with each other for the hire of labor, who would not be in this competition for the hire of labor, were it not for those particular duties which are thus enhancing prices.* Suppose a new country like Australia has hitherto imported clothing, and had but five occupations, viz., raising sheep, shearing sheep, transporting wool to market, and importing and selling clothes and groceries for the wool-growers. If the protective duties on woolen goods start the occupations of scouring, dyeing, spinning, weaving, and tailoring, the number of occupations will be increased from five to nine, and the number of competitors for the hire of labor in like proportion. At least, the degree of competition for the hire of labor, which was caused abroad by the manufacture of the cloth abroad, will be transferred to Australia, and added to the previous competition for the hire of labor there, together with the added competition involved in building the new factories and introducing machinery.

Labor obtains employment, only on condition that the employer, or enterpriser, can sell the product of the labor at a profit, after paying wages and the interest on his capital. An enterpriser or employer is generally a man or corporation who borrows his capital. In this country it is so usually true, that the enterprisers keep the workers busy, that workingmen fall into the habit of thinking that work comes by some inevitable necessity like sun-

rise or the tides. Many workingmen imagine that it is the great corporations and employing capitalists who cause their wages to be as small as they are, rather than that it is to these that they owe the fact that they can earn any wages at all. But, in fact, it is the competition of the enterprisers with each other that advances wages. It is the extent and number of the enterprises that can be made profitable, that increases the competition of the enterprisers, and protection determines the extent and number of the enterprises that can be made profitable, when such enterprises have to be begun against the competition of older, or stronger, foreign competitors. Without protection, therefore, American labor cannot at present, as against foreign labor, be kept fully employed. With adequate protection at all points it can. Nothing else can do it ; for where the "boss" cannot make a profit, labor must go out. India and China are examples of countries where the enterprisers are far behind the labor supply, because every man who gets a petty competency sufficient to cover his wants for the rest of his life stops work. They have not there the great corporations, large fortunes, and vast "monopolies," as we call them, which have distinguished Roman, English, and American civilization, because they have not the same power of combination. Hence their wages of labor are low—two or three cents a day. For in order that there may be an exhaustless demand for the labor of wages-workers, there must be an exhaustless ambition in those who can employ. Apart from the greed of the competent, there can be no relief to the need of the incompetent. Not only does the wage-worker, who feels that he has got enough, stop working, but the capitalist who discovers that he has got enough stops investing, and to cease investing in new enterprises is to cease employing new men. Hence what the poor most need, in any country, is men able to employ, *i.e.*, rich in present means, and who never know when they have got enough, and in fact never get enough. The curse of China and India, which keeps them poor and at famine's verge, is, that so little capital satisfies their money-making men, and retires them from the field of enterprise. Millions compete for employment, but no employers compete for labor. The surplus capitals of the rich, employed in reproduction, and competing with each other for the labor of the unemployed, are the cause of rise in rates of wages. Wealth not needed for present consumption, and therefore invested in building houses for rental, causes rents to fall. Wealth to lend lowers rates of interest.

The whole cost of all commodities and enjoyments resolves itself finally into one or another of three forms of compensation for labor, viz. : 1. *Wages of labor*, which covers merely the cost of employing all those workmen whose toil perfects the commodity, and perfects each raw material that enters into the commodity, after others have supplied the capital, including the land, and undertaken the risk essential to the creation of the raw material and the employment of the labor. 2. *Profits of enterprise*, which are the compensation for the risk of loss of the whole capital involved in the undertaking, and for that form of labor, care, and courage which assumes the risk of the demand for the commodity, when it shall be brought into existence, being sufficient to compensate for the cost of production, on sale of the commodity in open competition with all others who produce it, and to leave a margin of profit. This compensation or profit amounts to the whole excess, of the returns created by the demand, over the cost of production, including wages, rent, interest, and capital sunk. 3. *Interest and capital*, which, in the case of created capital, is the compensation for the use of labor previously hoarded or stored in commodities. In the case of land (rent) it is the compensation for the use of labor previously hoarded, or stored, in the form of the sum paid on the purchase of land, for the value which it has derived from the aggregate movement of society, *i.e.*, from its nearness to centers of social and industrial movement. In some cases, in cities, this value arises from its having been withheld, at considerable cost, for interest and taxes, from the inferior uses which would have lessened its value. Thus wages, rent, profit, and interest, are all but differing forms of compensation for labor—*i.e.*, of wages. The price of commodities is but wages, some of which are once, some twice, and some thrice removed. So much of the price, as was paid in wages for the last process of production, is evidently wages. For instance, in making pig-iron the census returns but a fifth of the cost as being paid for wages, *i.e.*, for evident wages, or wages of the last process involved. The ore, lime, and coal are raw materials, and a large element in the cost of these is labor, or wages, of production and transportation. The furnace, and fund from which wages are paid till the iron is marketable, are counted as capital, but these are only past labor stored, in plant and money. All capital, rent, interest, and profits therefore resolve themselves finally into wages. If they are not wages in the first instance, they are wages paid for the abstinence from the

pleasures of consuming previous wages. Or if there has been no abstinence, but only invention and enterprise, in perceiving avenues to wealth where others failed to see them, then the profits of such inventive energy or enterprise are the wages which society justly awards to the man who can teach it what is both new and valuable. There are no sources of value save in labor and the desire of that which labor obtains.

If, therefore, there are 1,500 protective duties affecting prices, there must be 1,500 domestic productions inadequate to supply the domestic demand. Hence there must be 1,500 *nuclei* of industry at which new employers are bidding against each other for the employment of workmen ; hence 1,500 centers of increased demand for labor from which higher wages for labor radiate on every side ; hence 1,500 centers of enterprise where capital is at risk for new profits, labor is making new products, rents and raw materials and wages are rising, and the prices of the finished product are falling. The statistics which prove the increased employment of labor and higher rates of wages in the United States under protection than under low duties are simply endless. Free traders try to ascribe the higher wages existing in this country to land, climate, inventive sagacity. But there was more land, and it was more fertile, in our colonial period than now, and yet labor was then worth but a shilling a day ; luxuries now common to the poor were then rare among the rich. Our climate merely rivals, without excelling, that of Europe, and inventive sagacity stores itself into machine power, of which England has rather more than we, the product of three hundred years of protection. High wages are due to such an organization of industries as keeps the whole people employed, and to attain the greatest possible diversity we must not only tolerate those which we cannot avoid having, but we must insist on having those which, at the outset, free foreign competition would be both interested and able to destroy. And we must do this honestly, in order to multiply the fields of employment for labor, and keep wages at the maximum, so far as human legislative effort can.

217. Protection Promotes National Unity and Peace.

DUTIES ON IMPORTS PROTECT THE DOMESTIC INDUSTRIES OF THE COUNTRY IMPOSING THEM WHEN, BY BRINGING INTO EXISTENCE AND DEVELOPING INTO A CONDITION OF SELF-SUSTAINING PROFIT INDUSTRIES ESSENTIAL TO AN ACTIVE INTERNAL COMMERCE DURING PEACE, AND TO THE NATIONAL DEFENSE DURING WAR, THEY INCREASE THE PROBABILITIES OF BOTH DOMESTIC AND

INTERNATIONAL PEACE, AVERT OR GREATLY MODIFY FINANCIAL CRISES, AND RENDER WAR LESS FREQUENT AND LESS EXHAUSTING.

The Cobden Club adopts as its motto, "Peace, good will among the nations," * but every sunrise is announced by the *réveille* of English drums, awakening English soldiers to back with the bayonet some new intrusion on the rights of barbarian races, in order to secure to British factories the profits of selling breech-clouts and wooden gods to some new tribe of heathen, to the prejudice of the local manufacture. Ten thousand Englishmen were slaughtered in 1884 in the Soudan as part of this programme. England has her nose in every quarrel on the face of the earth. She is not wholly out of war one month in twenty-five. Indeed, it is doubtful if she has been at absolute peace for a day since 1846. Free-trade in men and in commodities was the war-cry of our Southern Rebellion. It cost us one million lives and ten thousand million dollars. It had its face set backwards towards feudalism, baronialism, paucity of employments, poverty of laborers, the lash as legal tender for a day's work, civil war as a substitute for economic discussion, caste instead of currency, bullets instead of banknotes, and bullying in place of statesmanship. The whole origin of our late costly war was economic error, and every fibre of its economic errors is gathered up and woven into the detestable shibboleth of England's American implements and tools—"Free Foreign Trade." While the free trade argument in America has been identified with disentegration and disunion from the first, the desire to secure a national revenue through a protective tariff was the motive which welded the feebly united States of the Confederation into the present national Union. †

While the foreign trade policy is hourly breeding war among the nations, protection to home industry develops within every nation the most gratifying results of peace, and the best effects of commerce. It says to each nation, "Mind your own business." It teaches each that the best conquest it can make over its rivals is to absorb their pursuits, their arts, their populations, and their power, by active invention and peaceful immigration. We have room in the United States for 300,000,000 of people, and we must prepare for their coming. But they cannot all farm. To keep them busy every pound of our cotton must be spun and woven

* "Free trade, peace, good will among nations."

† See Mason's "Short Tariff History of the United States," and "Twenty Years of Congress," by James G. Blaine.

on our soil, thus saving wages and profits to the amount of $400,000,000 annually. We must produce all our sugar, whether from the beet, from sorghum, or from the cane, thus stopping an outflow of $100,000,000 annually, virtually in coin. We must so expand our urban and agricultural industries, as to render the foreign market unimportant to us for any purpose. This alone is the policy which will keep us at peace with each other and with all the world—will enable us to hold together this gigantic union of states, which, from the first, has exhibited so many of the tendencies toward forming itself into two nations instead of one. To maintain the Union by peaceful means, in preference to the bayonet, is the first problem in American statesmanship. It can not be done unless the two sections, North and South, have a commerce with each other five-fold greater than they now have, and to this end the commerce of both sections with England must be relatively less. Hence the maintenance of the Union now, as in 1832 to 1860, hinges upon the maintenance of the protective policy.

South Carolina virtually won disunion, when it bullied Congress into the Compromise Tariff of 1833. The same contest is again upon us, and involves the same consequences. As surely as the protective policy shall be abandoned, just so surely will the North be compelled to fight again, within thirty years, for political union with the South.

Thus, before us, lie the two forks in our road, as in 1833. To the left lie free foreign trade, and domestic dissension and disunion ; to the right lie protection, the prosperous expansion of our industries, and foreign and domestic peace.

Had the South begun the development of her manufacturing industries in 1780 to 1883, as at first urged by Jefferson, Washington, Madison, Calhoun, Clay, Benton, Jackson, and other of her most eminent statesmen, she would have fought for union, instead of for disunion, in 1861. But if a manufacturing South could be supposed capable of desiring disunion, that result could not have been defeated by arms. Free trade bred, in the South, both the errors that sought secession, and the industrial incapacity that rendered the effort a failure. Protection, if continued twenty years longer, will end the desire of the South to be either a separate nation, or a retrogressive force in the present nation, while developing in that section a power and self-sufficiency, which would render either desire omnipotent, if it could exist.

The United States have illustrated, on a tragic scale, the disin-

tegrating tendency of a policy of free trade with foreign nations, which had finally to be overcome by military force, and the national union, which was formed chiefly to enact a protective tariff on imports, was maintained successfully only through the financial and industrial solidarity imparted by the same tariff. Protection to domestic industry was the vital principle of Kossuth's movement in 1848 for the vindication of Hungarian unity, and which afterwards, under Von Beust, in 1866, found expression in the unity of the Austro-Hungarian empire. The same principle underlay the reconstruction of United Italy through the dash of Garibaldi, the radical penetration of Mazzini, and the clear statesmanship of Count Cavour. In France the national unity is never weak, because the sentiment of protection to home industry is innate. Thus everywhere the two phases, National Unity and Protection to Industry, are seen to be only different names for the same essential truth. On the other hand, the sole tendencies toward disintegration, in that Germany which Napoleon I. found it so easy to convert into the battle-ground of Europe, were identified with a free foreign trade. The tendencies toward German unity which crowned the late William emperor of a revived German empire, in Paris, after the victories of Metz and Sedan, were the fruits of protection. The disintegration of Ireland from England, and the continually proclaimed disloyalty of the former, are a fruit of the "sharp bargain" known as British free trade. Other dependencies of England are only loyal because permitted to be protective.

CHAPTER XVI.

STATE ACTION IN RELATION TO SPECIAL INDUSTRIES.

218. Silk.—The efforts, by government aid, to compel the culture of silk in Mexico, the West Indies, and the United States, date from the very settlement of these several parts of the continent, viz.: from 1522, under Cortez, in Mexico; from 1610, under King James, at Jamestown, in Virginia, and as early as 1604, in the West Indies. The attempted culture of silk, in these three portions of America, had a long and disappointing history in this period, when only the rudest industries and those most directly connected with food, shelter, and the needed raiment of the producers, could survive. This shows that, however sound the principle of state intervention and stimulus may be, when applied to right cases, it becomes, like private enterprise and industry itself, equally fantastic and mischievous when foolishly applied.

The production of silk requires the patient and skilled labor of a peaceful and contented people, not so much for the tending and feeding the worms, and the preservation and hatching of the eggs, as for the reeling of the silk from the cocoon, and the separation from it of all objectionable matter. Yet, from the first, the notion prevailed in England that not only could colonists, thrust into immediate conditions of danger, harassment, and turmoil, carry on this industry favorably, but that it could and should be made a happy means of converting Indian savages to the true faith, by exhibiting to them, in the wonderful operations of the silk-worm, proofs of the existence of a Creator. It was extolled as admirably adapted to the negro, owing to his indolence. It was even calculated, by one philanthropist, that England could save the entire cost of her pauper maintenance, by sending the paupers to Virginia, Carolina, and Georgia, to feed silk-worms. Their presumed shiftlessness was set down as the prime qualification which would assure success in the enterprise. In the 25 years from 1731 to 1755, about 251 pounds of raw silk, in all, were sent from the Carolinas to Great Britain, and about 8,829 pounds were sent from Georgia in the same period. This was under a parlia-

mentary bounty of three shillings per pound. In 1766 the bounties were reduced one-half. As late as 1790 raw silk was still produced, in a very small quantity, for export. In 1725 Pennsylvania had sent a small quantity of silk to England. Prior to the war for independence, Franklin and other leaders of thought were greatly interested in introducing the silk-worm and the mulberry tree. From the period of the first war with Great Britain to 1826, there was a scattered and unsuccessful attention given to the subject by individuals.

In 1826 Gideon B. Smith, of Baltimore, and Dr. Felix Pascalis, of New York, brought the *Morus Multicalis* tree to the attention of the public. Nearly all the States, from Maine to Georgia and Indiana, offered bounties, on the mulberry trees, on the cocoons, and on the reeled silk; counties, fairs, and stock companies interested in silk-growing followed with further offers. The United States granted a farm of 262 acres at Greenbush, N. Y., to one Clark, on condition that he should plant at least 100,000 mulberry trees. National and State silk conventions were held. Stock silk-growing companies were formed. America was under the influence of the speculative fever prevailing in England and France, in connection with the general inflation from 1824 to 1839, and a portion of the financial craze expended itself upon silk culture. The leaders of society, philosophy, industry, and science all wrote treatises on silk culture. The mystery and poetry of it were fascinating. Men had no railway shares to speculate in, and they speculated in multicaulis buds, silkworms, eggs, and mulberry trees. Prices rose to $1, $5 per tree, and profits, of six-fold the investment, were made in a single year, raising trees. In 1839 the bubble burst, and the trees were good only for pea brush. Only slight attempts to manufacture silk were made, though as early as 1837 Massachusetts was making sewing-silk to the value of $150,477, and employing 157 hands. Many, if not most, of the present successful silk houses trace their rise to the humble manufacture of sewing-silk then carried on. In 1840 the total production of American silk is estimated at 40,000 pounds. From this time to the present, the culture of silk in America has formed an inappreciable element in the supply, and the manufacture has been dependent on the imported raw silk. As respects silk culture, therefore, experience has shown that private enterprise is as likely to be injudiciously and wastefully applied as government aid. Both must fail where a vast number of persons allow their imaginations to get the better

of their judgments, so as to believe that an industry must prove profitable, merely because its processes are fascinating in a scientific point of view, and its product is attractive in an æsthetic sense. Lately, promising efforts have been made to cultivate raw silk in Kansas. It is asserted that the worms thrive as well on the Osage orange leaves as on the mulberry. As the manufacture increases, the culture of silk may, in time, become feasible. In 1850 the silk manufacture in the United States, obtaining its raw silk from Italy and China, employed 1,723 persons; in 1860, 5,435; in 1870, 6,649, and in 1880, 34,521. The value of the products expanded as follows: In 1850, $1,809,476; in 1860, $6,607,771; in 1870, $12,210,662; and in 1880, $34,519,723.

Inasmuch as the culture of raw silk has proved a failure, it may be conceded that whatever duties were collected on raw silk prior to 1846 (since that date it has been free of duty), as well as the bounties paid to promote its production, and the losses incurred in its attempted culture, have netted no other return than the happiness which always attends an enthusiasm, and the wisdom which often follows a defeat. The experimenters sowed for experience, and they gathered in the crop.

The present silk manufacture had its beginnings in a manufacture of sewing-silk, which was not greatly assisted by the attempts at silk culture. It owes its present dimensions largely to that universal emulation after equality with the best, among American women, which causes every such woman in whatever station to desire to possess at least one silk dress. This condition of sentiment among American women was itself produced by the higher average of material comfort accorded to American women, than to those of any other people, through our higher average returns in industry. This created the demand only. That demand would have continued, to this date, to be supplied wholly by foreign manufacturers, had the duty of 30 per cent. imposed for revenue, under the tariff of 1846 to 1861, continued to the present time. It was the raising of this duty, from 30 or 40 to 60 per cent. in 1864 which brought its revenue function into subordination to its protective function, and created the silk manufacture in the United States. The rise in the American manufacture has been attended by a general decline in the selling prices of silk goods in America, compared with the prices which prevailed under the 30 per cent. duty of 1846 to 1872, of about one-third.

The value of the silk manufactures imported in 1880 is almost identical with the value imported in 1853, being slightly upwards

of $33,000,000. During the war of 1861–5, the importation fell to about $11,000,000 worth, but for fifteen years past it has been twice or thrice as great, and it still exceeds the domestic production.

The tariff legislation concerning silk has been as follows: From 1790 to 1832, raw silk was free. In 1832 a duty of 12½ per cent. was laid, which in 1841 was raised to 20 per cent., and in 1842 to 50 cents per pound. In 1846 this was reduced to 15 cents per pound, and since 1857 it has been free. Silk manufactures came under a duty of 7½ per cent. in 1790, raised to 12½ and 15 per cent. in 1804–8—doubled to 30 per cent. in 1812–15. In 1842 the duty was made $2 per pound on silk twist, 25 per cent. on silk for manufacture, $1.50 per pound on pongees and plain white for printing and coloring, and from 1832 to 1836 manufactures from beyond the Cape of Good Hope were charged from 10 to 20 per cent., while those from Europe came in free—a very extraordinary attempt apparently to discriminate against oriental in favor of European silks. From 1861 the duty on manufactured silks became 40 per cent., and from 1864, 60 per cent. The revenue obtained has been from $11,000,000 in 1867 to $15,615,000 in 1882. This effectually refutes the *a priori* dictum of Mr. Mill that no duty can, at the same time, produce protection and revenue. The heavy protective duties, on actively competing products, seem to affect the national treasury much as a tight roof affects the family cistern. While the inmates of the household are protected from the exterior damps, fogs, rains, sleets, and chills which they would derive from too free an exchange of their vitality for nature's influences, the family cistern withal is filled with good water. For the same dampness which is fatal, when imported "free" through the roof, is a very useful adjunct to the housekeeper, when collected in the cistern.

219. Decline of Silk Manufacture in England.—England left her silk manufactures entirely unprotected in 1860, after having given them a steady, and at times a vigorous, protection, since the reign of James I. The visible decline set in from 1861. The number of her spindles employed in the silk industry fell from 1,338,544 in 1861 to 842,538 in 1878, and the number of persons employed declined from 117,989 in 1861 to 63,577 in 1878.* The imports of raw silk into Great Britain,

* Robert P. Porter found in Coventry in May, 1883, that the wages in the silk-weaving art had so declined that for making one class of goods known as 22-in. "mock grograins" the weavers could now only earn about 6*s.* 4*d.* ($1.56) per week.

which had averaged 6,191,691 pounds in 1867–70, fell to an annual average of 3,460,073 pounds in 1879 to 1882, including a decline of one-half in the raw material for manufacture. Deducting the amount re-exported, the quantity remaining for manufacture in Great Britain declined from 3,560,226 pounds annual average in the years 1867 to 1870 to 2,424,287 pounds in the years 1879 to 1882, while in the year 1880 the import of raw silk into the United States rose to 2,562,236 pounds, being slightly in excess of the British use of raw silk in manufacture. In 1829, 2,000,000 pounds of India silk came to England; in 1882 only 44,549 pounds.*

Mr. Robert P. Porter describes the decline of the silk industry in England as follows:

"Before the suicidal policy of free trade ruined the British silk industry it flourished in all these centers. In Congleton, twenty-five years ago, 5,186 operatives were employed, and to-day only 1,530; in Coventry 40,600 people were dependent on this industry; to-day not more than a quarter of the number are engaged in the ribbon trade. In Derby 6,650 were engaged twenty-five years ago, to-day only 2,400. In the most prosperous time of the industry in London 60,000 were employed, to-day only 4,000. Between 1841 and 1851 over 15,000 hands were employed in this industry in Macclesfield, to-day much less than this number.

---

* Japan in 1883 sent of raw silk

To England	2,983 bales.
" Europe (excluding England)	10,236 "
" United States	6,154 "

—*Textile Record.*

Meanwhile, the importation of foreign silks for English consumption ((*i.e.*, in excess of the foreign silks re-exported) is shown by the following figures to about equal the English production, as might be expected from the displacement of one-half the silk weavers of England:

IMPORTATION OF SILKS.

	Year 1880.	Year 1881.
Dress and piece goods	$23,738,318	$20,615,413
Hosiery	412,016	424,977
Other manufs. of silks	11,343,883	12,413,113
Totals	$35,494,217	$33,453,503
Decrease		$2,040,714

EXPORTATION OF SILKS.

	Year 1880.	Year 1881.
Foreign silks re-exported	$379,887	$246,671

Precisely as we have heretofore shown that the quantity of corn imported after the repeal of the corn laws was not an addition to the total supply, but only a displacement of the domestic production, leaving the supply the same; so the free importation of foreign silks is balanced by a withdrawal of domestic silk weavers from the industry, exactly equivalent to the force required to produce the imported silks, had their importation been prevented by protective duties.

The 5,000 employed in Middleton in 1850 have decreased to about 400 in 1884.

"Basle and St. Etienne send their goods, free of duty, into the English home market, and compete with Coventry. Germany and St. Chamond send in their braids and displace those of Leek. Roubaix, Lyons, Crefeld, and Milan have exterminated the once flourishing industry of Spitalfield. Germany, Switzerland, Italy, and France are pushing the Macclesfield goods out of the home market. Germans are underselling the Middleton district in galloons, and Calais undersells Nottingham in lace and hosiery. The effects of the French treaty, which Mr. Cobden negotiated in 1860, were most disastrous. From that moment the industry began to decay. I ask any fair-minded free trader to reply to the facts which I give below and which can not be contradicted.

"At Congleton the ribbon trade left the town. Throwing trade gradually declined, particularly in Italian silks. In Coventry it ruined the trade. In Derby it greatly reduced silk-throwing. In Leek it injured the serge trade. In London it brought ruin to many. A gradual reduction of Macclesfield production followed its enaction, while it destroyed the trade of Middleton, and in Manchester the silk trade practically died out. Nottingham was alone the exception with regard to the bad effect on the silk trade of the French treaty of 1860. It may even have derived a slight benefit from it, because the products are of such a nature as to command a demand for them abroad. Never was a more wanton and cruel blow aimed at a flourishing industry. In 1857, a few years prior to the ratification of the treaty, the import of raw silk into England aggregated 12,077,931 pounds. Since then it has dwindled year by year, as foreign manufactured goods have forced their way, free of duty, into the home market, until the last six years it has hardly averaged 3,000,000 pounds per annum, in 1883 being 3,178,593 pounds, and in 1881 sinking to 2,904,580. On the other hand, the imports of manufactured goods have gradually increased in value from about $10,000,000 in 1857 to $102,620,000 in 1883. A duty of 15 or 25 per cent. on this luxury would have held this important industry for England." *

---

* A commission recently appointed by Parliament, to ascertain the causes of this decline, addressed a letter to the Boards of Trade of the several silk centers of the country, and received the following replies:

Congleton: "Withdrawal of protection."

Coventry: "Free imports of French and German goods, combined with high duties imposed by other countries on our goods."

Derby: "Withdrawal of protection."

Of the silk manufactures still imported into the United States about $7,000,000 worth came from Germany, and nearly the entire balance from France. The free trade of England, in silks, is fast declining to "no trade."

Leek: "Sewing-silk trade maintained itself."

London: "Withdrawal of protection."

Macclesfield: "Free importation of French and German goods, especially black silks, velvets, and mixed goods."

Manchester: "The French Treaty."

Middleton: "The French Treaty of 1860, coupled with the adulterated dyes introduced into England."

Nottingham: "No decline, owing to the large increase in the use of silk lace."

The replies to the parliamentary inquiry in relation to the collapse of the British silk industry in the nine principal centers of the trade are brief, direct, and tinged with sadness.

J. R. McCulloch, while prematurely boasting in 1863 (in note to Adam Smith's "Wealth of Nations," p. 201), that the silk trade of England, two years after the repeal, was more prosperous than ever, still says that a duty of 10 or 15 per cent should have been retained. Why, if free trade were a sound basis? and why, if the silk manufacture was more prosperous than ever after the repeal of its protection? Such an admission shows, first, that McCulloch truly saw that the repeal of the duty would prove destructive to the industry, and also that he knew the industry was not then more flourishing than ever. There seems to be a potent spell in the word free trade that has the power to make an English economist say what he knows to be false, every time he alludes to it. Mr. McCulloch's note so palpably convicts him of hiding a protectionist belief, and indeed knowledge, behind a free-trade profession, that we publish it entire. It shows that McCulloch perceived that silk would be seriously affected by foreign competition; but he justifies allowing it to be sacrificed forsooth, because it was only a sixth or a seventh of the whole of British manufactures. And after admitting that free trade would seriously affect it, and that 10 or 15 per cent. duty should have been maintained, he still does his best to eke out a case for free trade. He said in 1863: "The value of the manufactured goods annually produced in Great Britain has been estimated at about 125 millions sterling, including the raw material. But linen and silk are the only manufactures that could be at all seriously affected by the freest intercourse with other countries; and the aggregate value of both these branches, inclusive of the raw material, does not probably exceed 18 or 20 millions, or from a sixth to a seventh part of our whole manufactures; and cannot, therefore, be supposed to afford employment to more than a corresponding portion of our manufacturing population.

"In point of fact, however, the free importation of foreign linens and silks would only supersede a very small part of these manufactures. There is no reason for supposing that any of the principal branches of the linen manufacture would be materially injured by the gradual reduction of the existing duties on the importation of linens. And although the French excel in the manufacture of lighter silk fabrics, we are superior, or at least equal, to them in the manufacture of gloves and hosiery, and in that of poplins, and all those mixed fabrics of which silk is the basis; and we are also rivalling them in the brightness of our colors, and the durability of our dyes. It has been a common practice to insure the safe delivery of French silks in any part of London for from 10 to 15 per cent. premium; so that it was not, as commonly supposed, so much, perhaps, to prohibitory regulations as to our own ingenuity, that our silk manufactures were indebted for that monopoly of the market they so long enjoyed. But their supposed dependence on customs regulations made them indifferent to improvements; and to such an extent did this operate, that they were decidedly inferior,

220. Evolution of Glass Manufacture.—All other of the fine arts are imitative of nature, or improvements on her work, except music. Music is essentially the creation of the human mind. So all other metallic substances, except glass, are the modification of a metal or an ore. Glass, while one of the most ancient, and decidedly the most beautiful of them all, has been created rather then discovered or improved, by human art. Without it, we could not have known the truth of the Copernican system in astronomy, that the earth daily rotates upon its axis, and annually revolves around the sun. Without it the king's palace was a pompous but comfortless barn, and the transparency of water, the sparkle of wine, the infinite beauties of the microscopic world, the transcendent majesty of the planetary and stellar universe, the composition of matter in distant worlds, and indeed nearly the entire scope and field of modern science, art, and invention would have remained unknown to men.

Specimens of glass ornaments are found buried with Egyptian mummies, and inscribed with the name of a monarch who reigned 1,500 years before Christ. The Egyptian use of glass ante-dates the story, that Phœnician sailors discovered it accidentally among the ashes of a fire they had kindled on the sand, and into which some soda had fallen, which, fusing with the sand, produced the crystal. The latter is doubtless apocryphal. Among the ancients, however, glass was an article of jewelry and ornament, a substitute for pearls and precious stones. A few highly wrought vessels and plates were formed of it, some of which have come down to us in tombs, and in the ruins of *Pompeii*. In modern Europe,

---

even in respect of machinery, to either the French or Germans. Mr. Huskisson had sagacity to perceive the cause of this inferiority, and courage to undertake the introduction of a new system. In 1825 he reduced the duties on raw silk to a nearly nominal amount, and materially diminished those on thrown or organzined silk; while, at the same time, the prohibition of foreign silk goods was repealed, and they were allowed to be entered for home consumption, on paying an import duty of 30 per cent. *ad valorem*. This change of system was violently opposed, and many predicted that it would ruin the manufacture. But these sinister auguries proved to be wholly fallacious. The measure in fact, was signally successful. The manufacturers, no longer depending on custom-house regulations, put forth all their energies: and, having called the various resources of science and ingenuity to their aid, the manufacture was more improved and extended during the dozen years ending with 1837, than it had been during the previous century.

"The duty of 30 per cent. on imported silks being so high as to give a considerable stimulus to smuggling, was reduced by Sir Robert Peel to 15 per cent., at which, or 10 per cent., it should have continued. It was, however, wholly repealed in 1860, under a clause of the French treaty of that year. The duties on foreign linens are now also wholly repealed. And yet these manufactures are (1863) in a flourishing condition, and are far more extensive than at any former period."

the manufacture was begun at Murano, near Venice, and carried to such a success that glass mirrors began to take the place of the mirrors of polished metal. Colbert, the father of the protective policy of France, brought the manufacture from Venice to France, contemporaneously with those of Sevres china, Flemish carpets, and Gobelin tapestry, in the splendid reign of Louis XIV. In 1614, the first French window glass was made, though it had been made in England in 1557, and in Scotland in 1610, but to an extent that only admitted of glazing a part of the windows of the royal palaces. Not until 1630 did the use of glass for windows reach the common people. Owing to the fabulous value of glass beads in trade with the Indians, artisans were sent to Virginia to make glass as early as 1609, eleven years before Plymouth Rock received the Pilgrims. In Salem, Massachusetts, in 1639, the first glass factory was encouraged by a grant of several acres of land. Three years after, the General Court authorized the town to loan the proprietors thirty pounds, to be repaid, "if the work succeeded, when they were able." In Scotland ten years after, the first glass house was erected, and the importation of foreign glass was prohibited. Scattered enterprises were undertaken in New York, New Jersey, and Maryland ; but as late as 1783 very little glass was made in America, except an inferior window glass and bottles. In 1795–97, General James O'Hara, Isaac Craig, and Stephen Bayard began the first glass works at Pittsburgh, the town having been laid out in 1784. Among General O'Hara's papers at his death was found a memorandum, as follows : "To-day, we make the first bottle, at a cost of thirty thousand dollars."

While it could easily have been shown to him that he could have imported the bottles at a cost of one cent from England, he would have deemed that fact quite irrelevant to his purpose, which was to leave to his adopted country one more industry than he found in it.

Prior to Alexander Hamilton's celebrated report to the first Congress, in 1790, on manufactures and the duty of protection to American industry, the duty on glass was two and a half per cent. He reported that the materials for its manufacture were everywhere found throughout the United States ; that the sands and stones called *tarso*, which include flinty and crystalline substances generally, and the salts of various kinds, particularly of the seaweed kali or kelp, are the essential ingredients ; that fuel was abundant, and that the manufacture only needed large capital, and would afford employment for much manual labor. He

recommended a bounty on window glass and bottles. In 1794, the duty on window glass was raised to fifteen per cent. and on certain elaborate glass wares still higher.*

In 1802, General O'Hara sent to England for more workmen, enlarged his works, and began the manufacture of white and flint glass. In 1806 Congress, in resentment of British outrages on American commerce, prohibited the introduction of most kinds of British manufactures, including glass. Though Congress soon after suspended the operations of the act, yet the issue of the Berlin and Milan decrees, prohibiting all commerce with the British Islands, while it seriously impaired our transporting and shipping interests and lessened our foreign trade, gave so great a stimulus to domestic manufactures as to increase with unexampled rapidity our domestic commerce.†

In 1807, O'Hara's white glass works at Pittsburgh were reported as producing glass to the value of $18,000 per annum, and a green glass factory had been erected on the opposite bank of the Monongahela. In 1808, the first flint glass factory was established in Pittsburgh by Bakewells & Co. They met with the greatest difficulty in procuring trained workmen and the proper materials, but at length established a profitable business.

In 1810 Secretary Gallatin reported ten glass manufactories in the country, employing 140 glass-blowers, and making 27,000 boxes of window glass of 100 square feet each; that of Boston

---

* It is interesting to note that, in the same year in which this tariff act was passed, its great author, Alexander Hamilton, formed an incorporated "Society for the Establishment of Useful Manufactures," with certain privileges, including a city charter over a district six miles square, at the Falls of the Passaic, N. J., which they named Paterson. It is now one of the largest manufacturing cities in the country. Three years afterward the "Hamilton Manufacturing Society" was incorporated and became proprietor of an extensive glass works, 10 miles west of Alabany, which its members had nine years before set in operation. The change of name was a tribute to the Father of American protection, to whose doctrines, relative to the supremacy and coercive powers of the National Government, as well as relative to economical questions, the country has been forced to return, to avoid dissolution.

† Under the protective tariff, framed by Hamilton in 1794, we were at this period, collecting so large a revenue that, after paying off upwards of $23,000,000 of the national funded debt in four and a half years, President Jefferson reports to Congress that there will be a surplus, unless the rate of payments is increased. He inquired whether it would do to remit the tariff on salt, which the salt importers were clamoring for then as now. Said he: "Shall we suppress the impost and give that advantage to foreign over domestic manufactures?" He expressed the belief that "on most articles the patriotism of the people would prefer its (the tariff's) continuance, and application to the great purposes of public education, roads, rivers, canals, and such other objects of public improvement as it may be thought proper to add to the constitutional enumeration of the federal powers."

made crown glass equal to any imported, all the others green or German glass worth fifteen per cent. less; that of Pittsburgh used coal, all the others wood for fuel. The importations of window glass were also 27,000 boxes, the extension of the domestic manufacture, which supplied precisely one-half the consumption, being retarded by want of workmen.

In 1810, three glass works in Pittsburgh produced flint glass to the value of $30,000,. and bottle and window glass worth $40,000. In the same year, a German, named Eichbaum, "formerly glass cutter to Louis XVI., late king of France," established business in Pittsburgh, and cut the first six-light chandelier, with prisms of his cutting, ever cut in the United States. It was suspended as a triumph of art in the house of Mr. Kerr, innkeeper, for public admiration. In 1812, large flint glass works were built simultaneously in Pittsburgh and in Boston; in 1814, a glass factory was built in Keene, N. H., where it is still a principal business. In 1815 two were projected at Cincinnati. In 1818, the New England Glass Co. established at Cambridge one of the most extensive flint glass manufactories in the country. With two flint furnaces, and twenty-four glass cutting mills, operated by steam, and a red lead furnace, they produced the finest work, Grecian lamps, chandeliers for churches, vases, antique and transparent lamps, and began to export, in competition with England, to the West Indies and South America. Capital $80,000; annual product $65,000. The Hamilton tariff was thus developing its fruits, substituting an export for an import trade.

In the next year, however, a series of influences which had been accumulating ever since the peace of 1815 suddenly broke upon the country, with a power that could be realized only by those who experienced them.

In 1810, under the joint influences of the Hamilton tariff and the Jefferson non-intercourse policy against England, our manufactures had rapidly increased, and our agriculture and internal commerce were prosperous. With a population of 7,239,903, the census of that year returned our manufactures at $127,694,602, and trustworthy estimates increased the total to $172,762,676, or about $21 *per capita*. This was only about one-fourth our present ratio *per capita*, but it had nearly all been the growth of fifteen years of encouragement.*

---

* President Madison in the same year, in his message, congratulated the country upon the extension of useful manufactures and the substitution of domestic for foreign supplies, and said: "In a national view the change is justly regarded as of itself more than

The urgent recommendation of Mr. Madison, that Congress should not, on the return of peace, permit the restoration of commerce with England to break down "the manufactures which have sprung into existence, and attained an unparalleled maturity throughout the United States, during the period of the European wars," was one with which Congress agreed, but which it wholly failed, through lack of the required foresight of changes in the conditions of industry, to carry into effect. A commercial treaty was adopted on the third of July at London, by which "*the duties on tonnage and imports* were equalized, so that the produce or manufactures of the one country could be imported into the other, in the ships of either, upon equal terms." This inaugurated, in principle, a free carrying trade between the United States and a country whose shipping was soon to be changed from wood to iron, and from sails to steam. The rate of duties was designed to be protective, but the great surplus stocks held abroad neutralized this design. The result was inevitable, and the disaster complete, and almost unparalleled in the misery it produced. The imports suddenly swelled to 155¼ millions of dollars in 1816, and the country was for the hour flattered by their enormous quantity—the duties, despite the lowness of the tariff, rising to thirty-six millions. English manufacturers competed with each other in piling heavy consignments of goods into the American market, to be sold at a loss, under a policy which Mr. Brougham at the time justified in Parliament in the following terms: "It is even worth while to incur a loss upon the first exportations, in order by the glut to stifle in the cradle these rising manufactures in the United States, which the war had forced into existence contrary to the natural course of things." The importers and auctioneers made heavy profits for a year or two. In 1816–17–18, the manufacurers of the country one after another were discharging their men. Sixty thousand operatives were discharged, and 240,000 persons dependent on them were reduced to distress. In 1824, after eight years of free trade, the depression had extended to all branches of industry. The country had reached that unfortunate condition in which Gen. Jackson wrote that unless protec-

---

a recompense for our privations and losses, resulting from foreign injustice, which furnished the general impulse required for its accomplishment. How far it might be expedient to guard the infancy of this improvement in the distribution of labor, by regulation of the commercial tariff, was a subject which could not fail to suggest itself to the patriotic reflections of Congress."

tion from competition with the cheap capital and pauper labor of Europe were restored, "we should soon be paupers ourselves."

In 1824, the tariff was made professedly protective as to some branches. In 1831, the committee in Congress on glass and manufacture of clay (for, instead of one general committee on manufactures as now, each leading industry then had its committee) reported twenty-one flint-glass furnaces in the United States, of which six were in and near Boston, and twenty-three manufactories of cylinder window glass, of which four were at Pittsburgh, four at Burnsville, Pa., and two at Wheeling, Va. The New England Crown Glass Company, and one of the kind near New York, were all, in that line. The total annual product was $3,000,000, employing 2,140 persons, subsisting 10,800, paying in wages $720,000.

In 1834, the manufacture of pressed glass, by means of metallic moulds, in imitation of cut glass, an American invention, was introduced into England, a proof among many that even for England Lord Brougham's policy of breaking down American manufactures was short-sighted. Within two years pressed glass had become a very prominent branch of the manufacture in all manufacturing nations. From this period until 1860, the growth of the glass manufacture was steady. Owing to the skill required in the manufacture, the abundance of our raw materials, the partial protection afforded by its friability, and the consequent losses by breakage sustained in shipping it across the ocean, it has been less affected than most industries by hostile or fluctuating legislative measures. In 1860, the census returned 112 manufactories of glass of all kinds, employing $6,133,666 of capital,* consuming $2,914,303 worth

* The statistics above given of "capital invested," and "hands employed," were not collected with the system and care necessary to make them trustworthy. Whether "capital invested" means the value of the original investment on which the business was started, without regard to losses or additions, or whether it means the actual cash value of the whole property employed at the time the census was taken, or the cash value thereof, less incumbrances and debts, or the nominal par of the stock of companies engaged, or the selling value of their aggregate stock, was not determined by the law, and each marshal in taking the census, and perhaps each manufacturer in making his statements, was left free to take either basis. A manufacture might have been started with only $10,000, actual capital, which, being paid out for $50,000 of property, would make the capital employed $10,000 or $50,000, as one chooses to put it. If then in ten years the business increases in profits so as to pay ten per cent. on $100,000, and the company is stocked on $100,000 capital, and its stock sells at par, it may be said to have $100,000 of "capital employed." Yet one-half of this on analysis is not capital but good-will. In this respect, therefore, the census figures form a very imperfect guide to capital invested. So of hands employed.

of raw materials, employing 9,016 hands, of whom 251 were females, paying $2,903,832 in annual wages, and producing $8,775,155 worth of glass annually. Our imports for the same year amounted to only $2,105,493. The census of 1880 showed 211 manufactories of glass of all kinds, employing $19,884,699 capital, consuming raw materials of the value of $8,028,621, employing 24,177 hands, paying $9,144,100 in annual wages,and producing glass annually to the value of $21,154,571. Of these products the glassware amounted to $9,568,520, the green glass to $5,670,433, the plate glass to less than $1,000,000, and the window glass to $5,047,313. Of the plate glass manufactories, two are in Indiana, one in Kentucky, and one in Missouri.

From 1816, glass has been protected by specific duties per gross and per square foot, an accurate statement of which in detail may be found, from 1790 to date, in the official compilation of the tariff by the Senate finance committee. Our imports of glass are now about three millions per year, and our production probably five times that value. The manufacture is one of the most artistic and beautiful in which the human energies can be employed. The conversion of the rude sand, ashes, and salts into a transparent crystal, the processes of fusing, molding, pressing, cutting, blowing, chasing, silvering, embossing, engraving, and lettering are all attractive to the mind, and educative to the hand, the eye, the nerve, and the taste. Through the refining power of intelligent industry, over the moral nature of man, these mechanical processes tend, like all the finer manufactures, to elevate the standard of thought, feeling, and life, as well as the wealth and comfort in the communities in which they are carried on.

221. Evolution of the Iron and Steel Manufacture.—The making of iron and steel implements for hunting, for war, and for defense, as well as for chaining prisoners, and for personal ornament, probably precedes any settled agriculture, and is possibly coeval with that prehistoric period in which domestic animals were tamed, and primeval man advanced from the hunting, or savage, to the shepherd life. In Central Africa, at points where very little cultivation of the soil was carried on, Stanley found tribes devoted to the manufacture of iron for

If a glass factory incidentally employs upon wages the men who mine its coal, or collect its fuel, its tinners, packers, salesmen, etc., its list of persons employed may appear at 250. But if, instead of hiring them on wages, it lets the same work to one hundred of them on contract, it only appears as employing 150. Yet, in both instances alike, the glass factory is the real employer of the whole number, and all would be unemployed if it should stop work.

spear-heads and arrows. Anterior to the age of iron and steel weapons, there was an age of stone and bronze. At the discovery of America, the Indians of North and South America were still living in this stone age, using bone for fish-hooks, flint for arrow-heads, and stone hatchets as well as mortars and pestles of stone for grinding their corn. In Asia, Africa and Europe, the remains of the stone age interest the archæologist, and are associated with an inferior brown race, small of stature, and low of intellect, which certainly spread over Europe, and may have had its habitat throughout Asia. But history, even in Africa, everywhere opens with iron somewhat known. In Homer, as Gladstone remarks, it is everywhere rare and precious. But in China, 2,000 years before Christ and 1,100 before Homer, it was commonly made, and of the best quality, as early as Western Asia or Europe were in a condition to leave written records of its arrival, by camel back, across the wilds of Tartary from the far-away land of the Seres. Dr. Schliemann finds no iron in the ruins of Troy itself, but Homer wrote long enough after his facts to admit iron becoming known in the interval. The pyramids antedate all history in Egypt, having come down from unknown builders, who may or may not have been of the same red race as the Egyptians of the historic period. Yet iron antedates the pyramids. In the Greek religion one of the gods, Vulcan, is a forger of iron, and this name is supposed by Goldziher to be identical with the Tubalcain, and even with the Cain, of Genesis.*

It thus appears that at least one of the manufactures, by a long stride, precedes agriculture, and this, if true, shows how erratic was the economic theory of Ricardo, that cultivation would begin on the best soils. The first cultivation would consist in the toil of hunters, fishermen, and herdsmen, or even of savages, seeking only materials for spear-heads, in collecting the earth to burn it for its iron. This would early attract attention and settlement to whatever unsightly hills, rocks, and forest-covered mountains might be found most productive of iron ore, lime, and fuel. These would command a rent even before the soil had begun to be tilled, because they would supply man with his earliest want—a destructive weapon.

Mr. Swank,† in his admirable "History of the Iron Manufacture," shows that Europe bristles all over with points where iron and steel was made in a primitive manner, as early as any thing

* "Mythology of the Hebrews," by Goldziher.

† "The Iron Manufacture in all Ages," by James M. Swank. 1884.

is known of the several parts in which it is made. Whatever the prehistoric man may have been, the historic man was a "smithie" from the start. The earliest historic nations—Egypt, Babylon, Assyria, Nineveh, Phœnicia, Greece, Rome—must have found in the iron and steel manufacture the chief reason why they became historic. Iron played an important rôle in organizing society. It furnished the sword, spear, bridle, spur, knife, lance, trowel, plow, loom, fish-hook, arrow-head, battering-ram, sceptre, shield, armor, gun, pen, cannon, engine, and ship. The mode in which an army could be drilled, and fought, depended on the progress its country had made in making iron and steel. The number of men capable of being handled under one leader, and the nature of the ranks and orders which should pervade society, are a secondary consequence of iron and steel. Sir Walter Scott truthfully portrays the importance of iron and steel, in his graphic interview between Richard Cœur de Lion and the Saracen chief Saladin. Richard vaunts his brute force by cleaving a bar of iron with his sword, while Saladin more deftly hints the graceful superiority which the Mohammedan world then temporarily enjoyed over the Christian, in the useful arts, by severing a silken scarf with his rapier, while it floated on the air.

222. Rivalry between Great Britain and America.—A century ago (1788) Great Britain produced only about as much iron as Georgia now produces, viz., 68,300 tons. Her entire imports were only 15,000 tons. All the more advanced forms of iron and steel production in Great Britain were limited to this small supply (83,300 tons), for their raw materials. This represents a degree of advancement about equal to that of the United States in 1820 to 1830. As the population of the United States was about 9,000,000 in 1820, and that of Great Britain, without Ireland, is believed (in the absence of a census) to have been about 9,000,000 in 1788, it may be said that the iron production bore as large a proportion to population in America in 1820 as it did in England in 1788—32 years earlier. The rise of production within the century in England was as follows :

Year.	*No. of Furnaces.*	*Tons.*
1796	121	124,879
1806	173	258,000
1820	284	400,000
1827		690,500
1840		1,396,000
1854 (then one-half the world's production)		1,369,000
1872		6,741,929
1880		7,749,233
1882		8,856,680

The United States in 1854 had barely passed the English product of 1827, by turning out 736,218 tons. In 1866, by producing 1,350,343 tons, we barely rivalled the British product of 1840. It was 1879 before we had caught up with the British product of 1854, producing 3,070,875 tons. And in 1887, a year of "boom" in the iron production in the United States, our product of 6,330,000 tons, of 2,000 pounds each, brings us into equal rivalry with the British product of 1872. It is probable that in fifteen years, if protection to iron and steel and their manufactures shall be steadily maintained, the American production will rise above the British production in quantity, and will meet it at every point in price. At present, the pig, bar, sheet, scrap, and other forms of crude iron and steel for manufacture are somewhat dearer than in Great Britain, while the finished forms of implements of iron and steel, such as locomotives, boilers, all railroad rolling-stock except rails, engines, machinery of all kinds, instruments, implements, edge-tools, nails, and builders' hardware, are on the same level in the two countries. It follows that, in the present state of the iron manufacture in the United States, the tariff duties paid on such forms of crude iron and steel as may be in any degree imported rest, so far as they are not paid by the foreign producers, on the American manufacturers of iron and steel goods, and not on the consumers or purchasers of the ultimate products into which they are made.

The efforts of Great Britain to repress the iron and steel manufacture during the colonial period were pointed and effective. In 1719 Parliament forbade the making of iron wares of any kind, out of "sows, pigs, or bars," and also the conversion of sows, pigs, or bars into rods. In 1750 Parliament removed the duty from American pig-iron, so as to induce its export to England, to be there manufactured, and enacted that all machinery for carrying the manufacture farther than pig, and for making it into rods or steel, should be, on criminal information, abated as a public nuisance. This law was generally enforced,* Benjamin Franklin's name as printer appearing under the Governor's proclamation by which its enforcement was announced in Pennsylvania in 1750.

Still earlier, however (in 1696-99), an act of Parliament had made it criminal to export from the kingdom any frames or engines for knitting gloves or stockings, under pain of forfeiting the frame and a fine of £40.

* Swank, "History of Iron Manufacture," p. 167.

In 1718 it was made criminal to entice any artificer away from Great Britain, and if any artificer, when so enticed into any country beyond the seas, there to carry on his calling, did not return, on six months' notice, to Great Britain, he forfeited lands, goods, became attainted so as to become incapable of taking property by descent, devise, or purchase, and was "put out of the king's protection."

In 1781 the export of utensils made use of in the cotton, linen, woolen, and silk manufactures, previously prohibited, was punished with increased severity. In 1785 these prohibitions were extended to tools and utensils made use of in the iron and steel manufactures of Great Britain. As late as 1825 and 1833 these acts were renewedly affirmed, with new penalties, and they were not repealed until 1845.*

Meanwhile, from 1782 to 1846, the British duties on iron and steel were much more protective † of the British product, than the American duties were of the American product.

Had the American Congress exactly copied, for the United States, the British tariff on iron and steel, which prevailed from 1790 to 1842, the American iron and steel manufacture would not have been crippled by the reverses which overwhelmed it in 1816 to 1819, in 1839-40, and in 1846 and 1857-61. It would have advanced to such a point that in 1822 to 1845, when it had become necessary to substitute iron engines, boilers, and screws for propelling vessels, in lieu of hempen canvas, and to build the ves-

---

* Swank, "History of Iron and Steel Manufacture in all Ages."

† Scrivenor's "History of the Iron Trade" says: "From 1782 till 1795 the duty on foreign bars was £2 16*s.* 2*d.* per ton. It rose to £3 4*s.* 7*d.* in 1797; from 1798 to 1802 it was £5 15*s.* 5*d.*; in two years it had got to £4 37*s.* 1*d.*; from 1806 to 1808 it stood at £5 7*s.* 5¾*d.*; in the three years between 1809 and 1812 it was £5 9*s.* 10*d.*; and in the five years ending with 1818 it had been £6 9*s.* 10*d.* At this date a distinction was made in the interest of British shipping: for whilst thenceforward, till the close of 1825, the duty on foreign bars was £6 10*s.* if imported in British ships, it was £7 18*s.* 6*d.* if imported in foreign. Nor was this all; iron slit or hammered into rods, and iron drawn down, or hammered, less than three-quarters of an inch square, was made to pay a duty at the rate of £20 per ton; wrought iron, not otherwise enumerated, was taxed with a payment of £50 for every £100 worth imported; and steel, or manufactures of steel, were similarly loaded with a 50 per cent. duty."

On the contrary, under (see Senate Finance Committee's compilation) our first American tariff of 1789 to 1812, most qualities of iron were under a duty, at first, of 7½ per cent., then of 10, 15, 17½, and did not reach 35 per cent. until the general war measure of 1812-1815, doubling all duties. After 1816 bar iron paid only from 45 to 90 cents per cwt., or about one-half the English rate. Nails under American tariff paid only 3 cents per pound, under the English 50 per cent., which was about three times the American rate. Articles not otherwise enumerated were from 20 to 25 per cent. in America, 50 per cent. in Great Britain.

sels themselves of iron and steel in lieu of wood, America would have been as well prepared as England, or better, to turn out the required quantities of iron and steel at low rates. Indeed the demand for iron and steel was intrinsically far greater in the United States than in England, since, as events have proved, the former would need to build 125,000 miles of railway where 17,000 miles would suffice for the latter. Thus in the failure of the United States, to protect its iron and steel industry and manufactures in the degree that England protected hers, lay the clue to the decline of American shipping when the time came for the transition from sails to steam and from wood to iron. During our colonial period, under the stringent English laws against the manufacture of bar and pig into the more finished forms, there was a steady annual export from 1718 to 1776, from the American colonies to Great Britain, of from 1,000 to 5,000 tons of pig, and from a very small quantity, or none, up to 2,000 tons of bar iron.* It would have been very easy, therefore, by a proper system of protective duties, to have developed our iron and steel manufactures at as rapid a pace as our agriculture.

The political effects of such a policy would have been even more important than its industrial effects. It would have pushed the iron and steel manufacture as well as the cotton and woolen manufacture, which are so largely dependent upon cheap iron and steel for their machinery, downward into Georgia, Alabama, Tennesseee, and North Carolina in 1840–50 with as much vigor as they have since entered into those States in 1870 to 1880—thirty years later. This would have caused a large part of what has been, during the past forty years a foreign commerce, between the South and England in raw cotton, and between the North and England in breadstuffs, to have been an internal commerce between the two sections. It would also have given a value to skilled labor at the South, which would have made the profit of gradually freeing the slave by converting him into a skilled workman, greater than the profit of retaining him in slavery. It would have caused also, more railroads between the North and the South, than were in fact built to unite both sections to England, by our seaports. More travel and trade, more interchange of residence and people, more commerce in ideas would have arisen between the two sections. The combined armies of the world could not, under these circumstances, have forced the two

* Swank's "History of Iron and Steel Manufacture," p. 388.

sections of the Union asunder. The protection question, especially in its relation to the commodities of iron and steel and cottons and woolens, is the outer husk of the Union question in the United States, as it has also been in Germany and in other nations. But, aside from this political significance, while it is a matter of judgment, not admitting of mathematical demonstration, it is our judgment that if in 1789 our forefathers had absolutely prohibited the importation of iron and steel, cottons and woolens, from any source or under any duty, the American people would have outstripped their English cousins in all these branches of manufacture as early as 1845, would have had more iron and steel to this time than they have had, and at a lower aggregate cost, would consequently never have suffered a decline in their ocean-carrying and would have escaped the southern war for secession.*

Mr. William Kent read before the American Association for the Advancement of Science, in 1884, a paper on railroad building, and the iron and steel manufacture in the United States, in which he happily stated the chief points of the evolution of the iron and steel industry since 1861, collected them all into a table of statistics, and then exhibited all the facts contained in the table in a static chart. They show that in 1860, after seventy years of vacillating and occasional, but always inadequate, protection to our iron and steel interests, ending with sixteen years of very low duties, we entered upon twenty-four years of actual protection.

*The world's iron and steel production is now as follows (Swank's "Iron and Steel Manufacture in all Ages," p. 393):

Country.	Pig Iron.		Steel.		Coal.	
	Year.	Tons.	Year.	Tons.	Year.	Tons.
Great Britain	1883	8,490,224	1883	2,158,880	1883	163,737,327
United States	1883	4,595,510*a*	1883	1,673,534	1883	96,159,719
Germany and Luxemburg	1883	3,397,588	1883	1,066,920	1883	70,223,456
France	1883	2,067,387	1883	509,045	1883	21,446,199
Belgium	1883	770,659	1883	220,000	1883	18,134,880
Austria and Hungary	1883	655,221	1883	271,732	1882	15,555,292
Russia	1881	462,042	1881	292,360	1881	3,437,840
Sweden	1882	399,001	1882	62,203	1882	250,000
Spain	1880	85,939	1873	216	1880	847,128
Italy	1883	53,000	1876	2,800	1882	220,000
Other countries	1882	100,000	1883	20,000	1883	8,000,000
Total	.....	21,076,571	.....	6,277,690	.....	398,011,841
Percentage of United States	.....	22	.....	27	.....	24

a, In 1886 the American product of pig iron rose to 6,366,668 net tons (of 2,000 lbs), being 5,634,543 gross tons.

In 1860 we were making less than a fourth as much pig iron as Great Britain ; in 1883 we made about five-eighths as much, and in 1886 three-fourths as much. The causes of the depression of 1873 are indicated in our chapter on commercial crises. Within the interval the manufacture of iron rails has become extinct, and

Year.	Immigration. Number of persons.	Pig iron produced in Great Britain. Tons of 2,240 pounds.	Prices per ton of 2,240 pounds. Steel rails.	Prices per ton of 2,240 pounds. Iron rails.	Prices per ton of 2,240 pounds. Pig iron.	Rolled iron, except rails, made in United States.	Pig iron made in United States. Net tons.	Approximate rail consumption. Net tons.	Rails imported. Net tons.	Total rails made in United States. Net tons.	Steel rails made in United States. Net tons.	Iron rails made in United States. Net tons.	Miles of railroad built.
1860					$23 34		919,770		.....	205,038	none.	205,038	1,846
1861	89,724	3,712,390		$ 48	20 03		731,544		.....	189,818	none.	186,818	651
1862	89,007	3,943,469		42 38	23 78		787,662		.....	213,912	none.	213,912	834
1863	174,524	4,510,040		41 34	35 12		947,604		.....	275,768	none.	275,768	1,050
1864	193,195	4,767,911		71 78	59 14		1,115,996		.....	335,369	none.	335,369	738
1865	247,453	4,819,254		126	46 78	536,958	931,552		.....	356,292	none.	356,292	1,177
1866	314,917	4,523,897		98 12	46 78	500,048	1,350,343		.....	430,778	none.	430,778	1,716
1867	310,965	4,761,023		86 12	44 78	595,311	1,461,226	625,157	163,049	462,108	2,550	459,558	2,449
1868	289,145	4,970,206		83 38	39 14	579,838	1,608,000	756,795	250,081	506,714	7,225	499,489	2,979
1869	385,287	5,445,757	$158 74	78 78	40 58	598,286	1,916,641	906,749	313,163	593,586	9,650	583,936	4,615
1870	356,308	5,963,515	132 44	77 14	33 14	642,220	1,865,000	1,019,153	399,153	620,000	34,000	585,000	6,070
1871	346,938	6,627,179	106 12	72 12	35 78	705,000	1,911,608	1,341,935	566,202	775,793	38,250	737,483	7,379
1872	437,750	6,741,929	102 78	70 98	35 78	710,000	2,854,558	1,530,850	530,850	1,000,000	94,070	905,930	5,878
1873	422,545	6,566,451	112	85 78	48 78	941,992	2,868,278	1,148,849	258,772	890,077	129,015	761,062	4,107
1874	260,814	5,991,408	120 12	76 78	42 34	1,076,368	2,689,413	837,724	108,311	729,413	144,944	584,469	2,105
1875	191,231	6,365,463	94 44	58 34	30 12	1,110,147	1,097,867	811,960	19,448	792,512	290,863	501,649	1,713
1876	157,440	6,555,997	68 34	47 34	25 12	1,097,867	2,266,581	879,916	287	879,629	412,461	467,178	2,712
1877	130,592	6,608,664	59 12	42 14	22 14	1,049,101	2,093,236	764,744	35	764,709	432,169	332,540	2,281
1878	153,207	6,381,051	45 12	33 34	17 12	1,144,219	2,314,585	882,695	10	882,685	550,398	322,890	2,687
1879	250,565	5,915,337	48 12	41 14	21 12	1,232,686	2,577,361	1,157,420	44,147	1,113,273	683,964	429,160	4,721
1880	593,703	8,377,364	67 12	49 14	28 12	1,838,906	4,295,414	1,752,526	290,680	1,461,837	954,460	507,762	7,174
1881	720,045	8,493,287	61 34	47 78	25 14	2,155,346	4,641,564	2,230,421	386,321	1,844,100	1,330,302	513,798	9,789
1882	730,349	8,490,224	48 12	45 12	25 34	2,265,957	5,178,122	1,912,921	224,127	1,688,794	1,438,155	250,639	11,591
1883	570,316	8,490,224	37 34	Not quoted.	22 78	2,283,920	5,146,972	1,390,671	38,977	1,360,694	1,280,554	80,140	6,755
													93,017

steel rails, of which we made our first in 1867, have superseded iron. The rapid rate of decline in the price of steel rails from

$158.50 per ton (gold) in 1868 to $37.75 per ton in 1883, at which date they were produced more cheaply than iron had been or could be produced, is one of the marvels of industrial development.

The preceding is Mr. Kent's tabulation of statistics plotted on diagram.

The chart, as appears by the figures on the left margin, is so drawn that each check space represents, as to immigrants, 50,000; as to railroads, a hundred miles annually built; as to iron and steel, 250,000 tons annually produced; and as to prices of rails, a rise or fall of $10 per ton.

223. American Ship-building, Coasting and Ocean Vessels, and Carrying Trade.—*a. The Raw Materials of Ship-building.*—The narrowness of the trading spirit was not sufficient in the early days, nor in the later midday of the republic, to cause it to be supposed that Henry Clay, of Kentucky, favored protection to American industries because the people of his State were largely engaged in growing the hemp that would be used in making canvas and cordage for shipping. The protection of our shipping, however, naturally received the first attention at the hands of the founders of our government. Owing to our great supplies of cheap lumber we had the first requisite to ship-building. The tendencies of the hardy sons of New England toward fishing and whaling supplied the second, a maritime class. Our position among commercial nations was less central than that of England, and our capital and banking facilities were less. Our manufactures also, were about thirty years behind those of England, in that quality of dimensions, or magnitude, which is the chief requisite to cheap production. With these aids and drawbacks, the adoption of the Federal or National Constitution in 1790 placed it in the power of Congress, for the first time, to legislate in a manner to develop our shipping.

b. The Navigation Laws.—The American navigation laws, adopted when the government was founded, permit only American-built vessels to be registered as American vessels. American vessels are of two classes, those engaged in the ocean-carrying trade, *i. e.*, between our ports and those of other nations, and those engaged in carrying between different points on our coast, which is called the coasting trade. From our coasting trade all foreign-built and foreign-owned vessels are shut out by peremptory prohibition, the provision of the statute being that any vessel having a foreign registry, which carries any freight or passengers between two American ports, unless they be ports between which

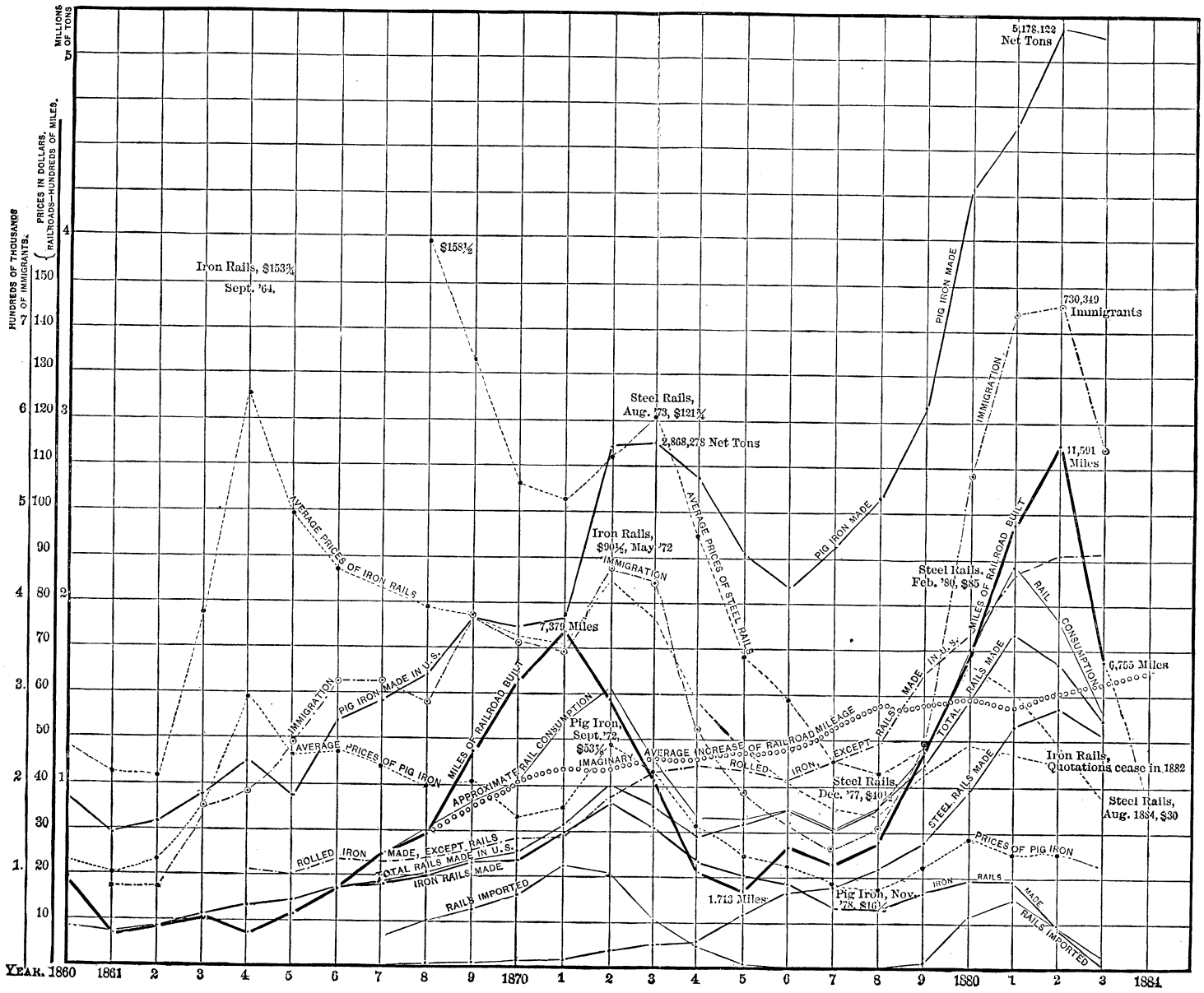


Diagram showing Railroad Construction, Rail and Iron Production, Immigration, etc., from 1860 to 1884.

there is direct overland communication through the country to which such vessel belongs, shall be forfeited.

Our navigation laws, as originally enacted, also virtually excluded foreign vessels from carrying a large share of our imports and exports by a system of "discriminating duties," which means higher duties on the same goods if brought on British or other foreign vessels than if brought in American vessels. Thus, under the act of 1789, teas, if brought in American ships from China direct, paid only from 6 to 20 cents per pound; if brought in American ships from Europe only, then from 8 to 26 cents per pound; but if brought to this country in foreign ships they paid from 15 to 45 cents per pound, or two and a half times as much as if brought from China in American vessels. This discrimination continued in principle, though frequently changed in amount, until 1833, at about which time, under the cry of free trade, then beginning to be popular with the Southern wing of the Democratic party, the discrimination was given away by the Senate in treaties with one foreign power after another, until it was virtually repealed. This withdrew tariff protection from our ocean-carrying trade, and opened the privilege of carrying our exports and imports to whomever would carry them cheapest. Our coasting trade remained, being held fast by the clause in our navigation laws which prohibited any foreign vessel from carrying between two American ports. For the period from 1833 to 1855, this practice of getting our carrying done where we could get it done cheapest did not develop any injurious effects, for the reason that vessels were still built of wood, of which we had the cheapest supply, and dependent on sails.

c. The Tonnage Acts.—The tonnage act passed in the first session of Congress also favored American shipping as against the ships of foreign powers. The rate imposed on vessels built and owned in America was 6 cents per ton; foreign-built and foreign owned vessels were charged with 30 cents per ton; and vessels both built and owned by foreign subjects were charged 50 cents per ton. The effect of the navigation laws and tonnage acts, on the carrying trade of England and America, is seen in the following table (from "Taxation in the United States," by H. C. Adams, p. 42):

Year.	American tonnage employed in foreign trade.	British tonnage employed in American trade.
1789	127,329	94,110
1792	414 679	206,065
1794	525,649	37,058
1796	675,046	19,669

These figures conclusively refute those who say that the best way to protect our navigation interests is to let them alone.

Adams further says (p. 70): "The growth of American shipping, from 1789 to 1807, is without parallel in the history of the commercial world. During the years intervening between those two dates, American tonnage engaged in the foreign trade increased from 127,329 tons to 848,306 tons, *i.e.*, the capacity of shipping owned by American citizens devoted to the foreign trade had increased six and eight-tenths times." Between 1816 and 1846 a series of about fifty acts of Congress were passed, from time to time repealing the tonnage duties by piecemeal, and as to one country at a time. In 1818 they were abolished as to vessels belonging to subjects of the King of the Netherlands, in 1819 as to Prussia, Hamburg, and Bremen. Among the last abolished were those on Spanish vessels, in 1846, from which were still reserved vessels coming from Cuba and Porto Rico. Mr. Wells, in his "History of American Merchant Marine," p. 85, says: "At the commencement of the war there were no tonnage taxes." We think this is substantially but not literally true. In 1862 a tonnage tax of 10 cents per ton was laid, which was afterwards increased to 30 cents, the present rate, payable alike by foreign and domestic vessels, and only once a year on any vessel, and alike whether she enters an American port once or a hundred times. But if any person, not a citizen of the United States, becomes part owner of a vessel of American build, then the tonnage tax is increased to 60 cents per ton, and the vessel ceases to be entitled to registry, or enrollment, as an American vessel.

d. The Plea for Free Ships.—An American citizen, who purchases an English vessel, has not the right to have it registered as an American vessel for foreign trade, or to have it enrolled or licensed for coasting trade, so as to entitle it to protection by our government as being in theory a part of our American soil. Exactly what the status of such a vessel would be in an American port we do not say, as we do not know that the question has ever been put to a practical test. If such a vessel should attempt to take part in our coasting trade by carrying goods from New York to Charleston she would be forfeited, because the statute so declares. What the legal consequences would be of her taking part in foreign traffic, without being registered as an American vessel, or as a vessel of any other nation, we do not say. The reasons of this state of the law are that, to allow the free importation and registration of foreign-built ships would, in the present con-

dition of prices for ship-building here and abroad, practically put an end to the American business of building ships, for whatever portion of our carrying trade the ship so imported could be used. If she could be used only in our ocean-carrying trade, then the free importation of ships for ocean-carrying only would destroy American ship-building for ocean-carrying only. If ships, however, could freely be imported for the coasting trade as well, *i. e.*, for carrying between American ports, then American ship-building for coasting, lake, and river purposes would all be seriously invaded or left open to invasion and destruction at any time. In return for the national character accorded to American vessels during peace, the government has the right under a sort of eminent domain to use them for naval purposes during war. Our government has always held that it must, for its naval protection and national defense during war, absolutely prohibit foreign vessels taking part in its coasting trade. Great Britain did the same for its coasting trade until 1849, when it threw open the right to carry between British ports to the vessels of all nations.

e. Effects of withdrawing protection from ocean-going ships and entering on a free scramble for the ocean-carrying trade without subsidies.—In our ocean-carrying trade, however, the United States applied the protective policy in behalf of American vessels, by admitting goods brought in vessels owned by Americans, at lower rates than if brought in foreign vessels, from 1789, when the first navigation laws where passed, to 1815, when by the reciprocity treaty * with England we agreed to charge no discriminating duties or tonnage against English vessels coming into our ports, if England would charge none against American vessels entering hers. The adoption of the policy of discriminating duties, of which Madison was the strenuous advocate, had transferred to American vessels the ocean-carrying which had

* Rt. Hon. Wm. Huskisson, president of the Board of Trade, speaking in the House of Commons on May 12, 1826, says essentially that England adopted the so-called reciprocity law of 1815, giving American vessels the privilege of carrying goods and products of other countries into British ports, because it desired for English ships the privilege of carrying goods of other than English production into American ports, and because it thought the reciprocity would give American vessels few or no additional freights, while it would give English vessels sailing to America an increase of freights of great value.

Until August 5, 1882, American vessels paid port and dock dues on the gross tonnage, while English vessels paid only on the net tonnage. The National Line steamer *America*, having a gross tonnage of 5,528 tons, and a net tonnage of only 2,829 tons, if registered as an American vessel would pay as port dues $1,658.40, but as an English vessel only $847.70.

previously been done by English. The American tonnage employed in foreign trade had multiplied five times in nine years, and the English tonnage employed in the American trade had declined four-fifths. From 1815 to 1851 the ocean-carrying trade of both England and America continued to be carried on in wooden ships. While England gained immensely, relatively to other nations, by having induced us to adopt the free-trade policy of getting our exports and imports carried where we could get them carried cheapest, still we did not lose, so long as the carrying was done in wooden ships, except in attempting to compete with ocean steamers. We could always build wooden ships cheaper than they could be built in England.

In 1855, however, our relative deficiency in iron and steel manufactures began to send us behind. The following schedule shows the degree of decline in our tonnage engaged in the ocean traffic, which was thrown open to a so-called free competition, but really to a competition with an English subsidized commercial marine :

Year.	*Tonnage in foreign trade.*	*Tonnage in coastwise trade.*	*Value of exports and imports.*	*Per cent. carried in American vessels.*	*Per cent. carried in foreign vessels.*
1840	762,838	1,172,694	$231,227,465	82.9	17.1
1845	904,476	1,223,218	231,901,170	81.7	18.3
1850	1,439,694	1,797,825	330,037,038	72 5	17.5
1855	2,348,358	2,543,255	536,625,366	75.6	14.4
1860	2,378,396	2,644,867	762,288,550	66.5	33.5
1865	1,518,350	3,318,522	604,412,996	27 7	62.3
1870	1,448,846	2,638,247	981,896,889	35 6	64.4
1875	1,545,998	2,219,698	1,219,434,544	25.8	74.2
1880	1,314,402	2,637,686	1,613,770,633	17.4	82.6
1881	1,297,035	2,646,011	1,675,024,318	16.0	84.0
1882	1,259,490	2,873,638	1,560,071,700	15.5	84.5

From this it appears that our tonnage employed in foreign trade is only one-half as great as it was in 1855–60, while our tonnage employed in the coastwise trade has slightly increased, some of it being interfered with by our rapid railway development.

f. English subsidies to vessels an efficient form of protection.—When Great Britain seduced us in 1815 into applying free-trade principles to our ocean-carrying trade, she did not agree not to subsidize her own vessels. While she invited our vessels to free competition, she subsidized her own, thus playing against us with loaded dice.

About 1840 * Cunard secured a subsidy of £60,000 per year for a monthly line of steamers between Liverpool and Halifax and Boston, which was increased in 1849 to £90,000. Soon after the United States government granted a subsidy to the Great Western Steamship Company, or "Collins" Line. Cunard thereupon obtained from England an annual subsidy of £145,000 for a line to New York, and in 1849 testified before the Committee on Contract Packet Service: "If I had got this contract three months sooner there would have been no American line." Mr. Colburn, Chancellor of the Exchequer, admitted having sustained the Cunard competition at very heavy expense, but said it was not right to place that expense to the account of the post-office. (Hansard, lxiv. 321.)

On June 14, 1858, through the influence of Robert Toombs of Georgia, and as one of the measures preliminary to an expected dissolution of the Union, an act was passed limiting the Postmaster-General and forbidding him to make a contract for carrying ocean mails to run more than two years or to involve a higher expense than sea and inland postage. At that date the Cunard Line was working under an eleven years' contract, with an annual subsidy of £191,400.

This law destroyed the Collins Line, and the Havre and Bremen (American) lines followed within a year or two after.

The report of the Committee on Contract Packets, made to Parliament in 1853, says: "The objects which appear to have led to the formation of these contracts, and to the larger expenditure involved, were to afford us rapid, frequent, and punctual communication with distant ports which feed the main arteries of British commerce, and with the most important of our foreign possessions, to foster maritime enterprise, and to encourage the production of a superior class of vessels which would promote the convenience and wealth of the country in time of peace, and assist in defending its shores against hostile aggression."

It referred to the Cunard subsidy as having grown to £173,340, or at the rate of $2.72½ per mile (traveled), and £61,642 in excess of the postage received.

In an examination of witnesses before the Parliamentary Committee on Packet and Telegraph Contracts in 1859, the following questions were asked:

By Richard Cobden—

---

* Edward P. North in forthcoming article in *North American Review.*

Q. 558. You are aware that it (the Collins Line) ceased because the American government withdrew the subsidy ?

By Mr. Wilson—

Q. 613. Mr. Cunard's contract is £191,000, is it not ?

A. Yes, £191,400.

Q. 617. £320,000 is the amount which is now paid by this country and the colony for the trans-atlantic postage, including the Galway Line ?

Q. 618. And in the face of these increasing subsidies the American government has altogether relinquished the practice of subsidizing their vessels, and their vessels of course have been driven off the passage ?

International contempt, for the folly of any class of public dotards and imbeciles, was never more heartily expressed than in questions 558 and 618, in which the English free traders, Cobden and Wilson, record their scorn for the stupidity and unpatriotism of their American dupes and allies.

In a letter in the London *Times* of September 28, 1886, from J. Henneker Heaton, M. P. for Canterbury, to the Postmaster-General Raikes, in reply to the assertion of the Secretary of the Treasury, that "we" (Great Britain) "are losing £1,000 a day, £365,000 a year, by our ocean mail service," he says: "As a matter of fact these subsidies are not paid to make up a deficiency in the postal accounts, but in order to keep up the character of our merchant fleet." Until three years ago, England was the only European country sending regular, and fast, steamships to Australia. Since then the French government subsidized the powerful *Messageries Maritimes* to the amount of £160,000 a year, and now the four-weekly steamers are to be changed to fortnightly, with £250,000 a year. The German government also established a splendid line of steamers to Australia with a subsidy of £120,000 a year.

In a report issued by the British post-office in 1863 it is said: "To assume that these packets were only established for post-office purposes is to charge the government with the most absurd extravagance. The West India packets, for instance, were established at a cost of £240,000 per annum, though the utmost return expected from letters was £40,000, leaving the £200,000 a clear deficit."

After 1858 all the "subsidy" American vessels were getting was two cents postage per letter for carrying mails which they

would freely have paid fifteen cents to avoid carrying. The subsidies to English vessels were as follows:

Years.	Bounty or subsidy paid British ships by British Government.	VALUE OF TOTAL IMPORTS AND EXPORTS.	
		American Ships.	Foreign Ships.
1848	$3,250,000	$238,300,163	$70,775,896
1849	3,180,000	220,915,275	72,697,984
1850	5,313,985	239,272,084	60,764,854
1851	5,330,000	316,107,239	118,505,712
1852	5,510,635	294,735,404	123,219,817
1853	5,865,400	346,717,127	152,237,677
1854	5,950,559	406,698,539	170,591,875
1855	5,741,633	405,485,462	131,139,904
1856	5,713,560	482,268,274	159,336,586
1857	5,133,485	510,331,027	213,517,796
1858	4,679,415	447,191,304	160,066,267
1859	4,740,190	465,741,381	229,816,211
1860	4,349,760	507,247,757	255,040,693
1861	4,703,285	381,516,788	203,478,278
1862	4,105,353	217,695,418	218,015,296
1863	4,188,275	241,875,472	343,056,031
1864	4,503,050	184,061,486	485,793,548
1865	3,981,995	167,402,492	437,010,124
1866	4,227,018	325,711,961	685,226,691
1867	4,079,996	296,998,387	580,022,004
1868	4,047,586	297,981,573	550,546,074
1869	5,481,690	289,956,772	586,492,012
1870	6,107,761	352,969,607	638,927,282
1871	6,070,741	353,664,172	755,822,576
1872	5,693,500	345,331,101	839,346,362
1873	5,665,296	346,306,597	966,722,651
1874	5,697,346	350,451,994	939,206,106
1875	4,860,000	314,257,792	884,788,517
1876	4,420,271	311,076,171	813,345,987
1877	3,976,580	316,660,281	859,920,536
1878	3,914,990	313,050,906	876,991,129
1879	3,768,230	272,015,692	911,269,332
1880	3,873,130	280,005,097	1,309,466,796
1881	3,601,350	238,080,603	1,378,556,017
1882	3,538,835	242,850,815	1,284,488,861

The difficulty of finding commercial vessels, carrying the American flag over ocean traffic, is not quite so great as our free-trade enemies contend, but such as it is, it is all due to free-trade principles, applied in four ways, viz.: 1. Opening our ocean-carrying trade to free competition; by treaty of 1815, no protection whatever has been given to our ocean-carrying trade for seventy years. If it has failed, it has failed on the free-trade basis, and its failure must be charged up to free-trade

principles only, viz., getting our carrying done by the cheapest carrier. 2. Withdrawing protection from iron and steel manufacture, by tariffs of 1833 and 1846. 3. The war of the South for secession, professedly to establish free trade. 4. The war on American shipping by English cruisers in 1861–5 in the interest of British free trade.

g. The Transition from Wood and Sails, to Steam and Steel.—Doubtless, had we, from 1816, or even from 1833, adequately protected our iron and steel manufacture, the throwing open of our ocean-carrying trade to a free scramble between us and other nations might have continued to be void of harm to us. For, in that case, we might have been prepared, by 1855, to pass from small wooden ships to large iron and steel, and from sails to steam, in competition with England. Necessarily England could only enter upon the iron and steel manufacture, to any considerable extent, after the epoch of the locomotive, and its application to land and water locomotion, which was in 1828–30. The two free-trade policies combined, of throttling our iron and steel manufacture at home, and opening our ocean carrying trade to free competition with England, brought us to a condition in 1850–55 where England was prepared for the great transition from small clippers to great iron steamers, and we were not. So long as the transition related merely to the change from sails to steam we held our own. In 1851 Great Britain herself had only 65,921 tons of steam shipping engaged in the foreign-carrying trade, and the United States in the same year had 62,390 tons, being nearly equal. It grew until 1855, when we had 115,000 tons. Thence it stood still, and in 1862 it was less by 2,000 tons than in 1865. Our sales of vessels to foreign ship buyers began to decline in 1855, and by 1860 were insignificant. The transfer of American ships to foreign owners during the war, to prevent capture, and the destruction of our ships by the war, together with the enormous impetus given to our internal industries, especially railroads, at the return of peace, and the facts that capital invested in American ships paid a state personal property tax, while that invested in foreign ships paid no tax whatever on the principal, and other facts conspired to deter American capital from investment in ships. In 1880 the fact developed in England and on the continent that in Europe there had been an over-production of ships. They were anxious to sell off their stock to Americans before the decline of values set in. An immense free-ship lobby, consisting about equally of English-

men enlisted in the shipping interest, and of Americans who had never owned ships and never intended to, set up a cry for "free ships," so that Americans could be induced to take the English surplus off their hands. There could be no interest whatever on the part of American capital to raise the cry. For if any American capitalist desires to become a ship-owner he can become a part owner in any English vessel, to any extent short of becoming an owner of the whole vessel. His capital will earn better dividends in an English than in an American vessel, for the three-fold reason that it will not be taxed for state and local purposes; that it will receive its share of about $6,000,000 a year of subsidies for carrying mails, and will not have to sustain the consular service, which in England is sustained by salaries, but among us by fees, which are a tax on the ship-owner. Now we come to the objections which exist to the free-ship fraud.

h. Why Ocean-going Vessels must be Built by Ourselves.—Every registered American vessel has three aspects. If it could be built abroad it would be an imported product of foreign labor, and as such would compete in the American market with American-built vessels. Whether built abroad or here, it becomes in law part of our American soil, and entitled to be defended as such by the whole force of the republic. In return for this obligation to protect it, the nation is entitled to take it for naval purposes, at an appraised value, if it wants it. By international law, however, and the laws of European states, the ship is protected from this right if it re-registers under a foreign flag before it is taken. Two considerations, therefore, are paramount in deciding whether we can afford to take these foreign craft and adopt or naturalize them into our merchant marine. These are: First, will they be ours when we want them for war purposes? For we do not want to take under our national protection a fleet of thousands of merchantmen which, at the first note of war with a foreign power, will slip back again out from under the American flag, and become British vessels. This point, in its turn, will depend on whether the capital owning and men controlling them would really be American, or whether it would continue British. Now, as American production had no motive of profits to invest in a naturalized English ship, which would not have been fully met by its existing privilege of buying shares in foreign ships, it may be assumed that the capital embarked in the Americanized vessels would continue to be in their English builders and mortgagees. So long as we built our railroads of English rails, they remained

English investments to the end. Presumptively English-built ships would remain the property of their English builders, and nine of the transfers out of ten would be merely colorable, or, if made in good faith, would retain the core of the watermelon in the form of bottomry liens in behalf of English mortgagees. This being so, at the first speck of war they would all return to the English flag. They would not perform the function for which alone we give them national protection.

A second consideration would be, whether we would admit them to, or exclude them, from the coasting trade. The framers of the free-ship bills—Codmans, Wells, and the Free-trade League—all asserted that they did not seek admission to the coasting trade. But, obviously, it would be absurd to have a class of American vessels sailing from New York to Havana, who would be liable to forfeiture if they touched and took cargo at Savannah, in Georgia. It was obvious that the coasting trade also must be open to them, if they were to be American vessels. But to open our coasting trade, to the competition of all the world, would destroy the last vestige of our ship-building, close every ship-yard, and leave us with a fleet of foreign-built and foreign-owned vessels, who, at the first sound of war, would return to their foreign flag.

i. Liberality of English Subsidies Contrasted with American Parsimony.—The British government dispenses its subsidies at the discretion of the Board of Admiralty. Though the carrying the mails is made a condition of the subsidy to each line, yet the amount of the subsidy is graduated by the judgment of the Admiralty as to the probable deficit in the earnings of the company to sustain the route, and not by the value of the mail service to be rendered. The payments of subsidy are also annual sums in gross to the line, and not a postage per letter. From 1850 she paid $705,666 per year to the Cunard Company ; to four companies she paid a total of $4,523,666 per annum, graduated according to their needs. From 1848 to 1854 she paid, to bring her steam fleet up to 304,559 tons, a total of $23,390,020—a subsidy equal to $93 per ton, which is more than such a fleet would sell for to-day. She also induced Brazil, and other countries, to join her in subsidy schemes in favor of her own vessels, to the extent of $1,500,000 per annum, making her entire subsidy fund between 1849 and 1854 $8,023,000 per year. From 1854 to 1860 England spent $36,308,632 in subsidies on her steam merchant marine, and increased her tonnage from 304,559 tons in 1854 to 452,352 tons in 1860. From 1861 to 1865 England was making war on our commerce, so

much more effectively through the rebel pirate ships sent out from her dock-yards, than she had been able to do by subsidies, and American competition in the ocean-carrying trade was so swiftly disappearing, that she rapidly reduced her subsidies, until in 1865 she paid less than at any time since 1849. Indeed, her economy had dated from the year 1854—the very year in which, under the pressure of her competition, our merchant marine began to decline. In 1854 England began to diminish her subsidies in consequence of the refusal of the American Congress to aid American shipping, and in 1870, in consequence of the United States having for the first time granted a subsidy to the Pacific Mail, England for the first time jumped her subsidies up to a higher figure than they had been since 1854. In the intermediate period England had saved in reduced subsidies, compared with those she was paying while the United States was a successful competitor, exactly $19,472,094, or $5,000,000 more than was necessary to pay the Alabama claims, which was the whole cost of her war on our commerce. This will appear from the following schedule of the amounts saved by Great Britain, in subsidies, in each year after the decline of our commerce began, compared with her expense for subsidies in 1854 :

Year.	*Subsidies paid.*	*Saved relatively to the year 1854.*	*Year*	*Subsidies paid.*	*Saved relatively to the year 1854.*
1854	$5,950,559	.....	1864	$4,503,050	$1,347,509
1855	5,741,633	$208,926	1865	3,981,995	1,968,564
1856	5,713,560	236,999	1866	4,227,018	1,723,541
1857	5,133,485	817,064	1867	4,079,996	1,870,253
1858	4,679,415	1,271,144	1868	4,047,586	1,902,973
1859	4,740,190	1,110,369	1869	5,481,690	468,869
1860	4,349,760	1,600,799	1870	6,107,761	.....
1861	4,703,285	1,247,274			
1862	4,105,353	1,845,206	Total		$19,472,094
1863	4,188,275	1,762,274			

From these figures it appears, that if England had set apart the sum she could save annually in subsidies by the effective demolition of our ocean-carrying trade, as an insurance fund to indemnify her against all cost of making war on our commerce, even to the extent of fitting out rebel privateers to destroy our vessels, she would have made a net profit, merely on her savings of $5,000,000, to say nothing of the fact that while these savings were going on she was increasing her shipping to 5,150,000 tons, valued at $1,000,000,000, all of which represented wages paid for British labor, and was giving employment to 240,000 men in the construction and repairs of her ships, and to 220,000 more in sailing them, the latter of whom would increase her national earnings by $350,000,000 a year.

Between 1854 and 1882 Great Britain has paid in subsidies to her shipping $164,000,000, while the United States in 1881 actually collected postage, on her mail matter going to foreign countries, to the amount of $1,560,679.90, and paid for carrying all its mails to foreign countries only $239,141.21, thus taxing her mail-carrying ocean-going ships, in the sum of $1,321,548.69 for benefit of the land mail service.

224. Evolution of Manufactures in Canada.—The Liverpool *Cotton Circular* about four years ago said:

"This country has suffered very severely of late years, from the increasing stringency of foreign tariffs. There has been a growing tendency evinced in most countries to protect their own industries, and in every such case we are the chief sufferers, for we live, as already said, by exchanging our manufactures for the necessaries of life. The United States was at one time a large customer for iron-ware and textile fabrics; but the hostile tariff she has enforced, since the civil war, has nearly driven us out of her markets, and has built up a vast system of manufactures, which completely supplies her own wants, and leaves something to spare for competition with us in foreign markets. The free traders of this country console themselves by thinking that she is the chief sufferer; but whether this be so or not (which is very doubtful) the fact remains that her markets are almost lost to us, and we, on the other hand, are constantly more dependent upon her for food and raw material. For this we have no means of paying except by money or bonds, or indirectly by our credits with China, Brazil and other countries, from which America imports tea, sugar, etc. *Our colonies all follow in the wake of the United States, and do their best to stimulate their own manufactures by closing their markets against ours.*"

The significent statement that the British colonies all follow in the wake of the United States, notwithstanding the fact that the United States makes no effort to induce them to do so, while the British administration and Parliament use every blandishment to persuade them not to do so, goes far to prove, as Bonamy Price says, that protection is an ineradicable instinct, and that, as Mr. Lester F. Ward * holds, government by coercion (and perhaps by tradition also) is rapidly giving place, throughout the world, to "government by attraction." The American Congress may well say to Great Britain, in the matter of her colonies, both American and Australasian, "We care not who appoints their Governors-General, so long as we inspire their tariffs."

In 1879, largely under the leadership of Sir John A. Macdonald, Canada determined to protect certain of her manufactures, including cottons and woolens. We have referred to Prof. Sidgwick's ingenious argument that, on purely economic grounds, the Northwestern States (Michigan, Indiana, Illinois, Iowa, Wisconsin, and Minnesota) would gain by the more rapid advance in manufac-

* "Dynamic Sociology," by Lester F. Ward, 2 vols.

tures they would make if permitted by the Constitution to protect certain of their manufactures against the overwhelming competition of the long-established manufactures in New England and Pennsylvania. Under the Constitution of the United States, this is a problem in purely speculative economics, as the "if" in the way of its practical realization is probably insurmountable, and certainly so without changes in the American Constitution which would look like disintegration and are never likely to be asked for. Inasmuch, however, as American free traders by profession ask us why, if a tariff is good to protect New England from old England, would not a tariff be equally good to protect the Northwest from New England, we have, therefore, placed side by side the results of the adoption of the protective policy in Canada, with the economic results of that inability to adopt a protective policy as against New England and Pennsylvania, which pertains to the Northwest as a section, by force of the inhibition contained in the Federal Constitution. We do this because we do not desire to blink or evade any issue legitimately collateral to the protection policy. There are grounds for holding with Prof. Sidgwick that the Northwest would for a period make an economic gain, through the more rapid advance in manufactures which would ensue, if the Northwest were free to protect their manufactures of cottons, woolens, paper, iron, and steel against their Eastern competition by some means more effectual than mere cost of transportation.

The results of four years of the protective policy in Canada, as exhibited in a recent report of Mr. William T. Patterson, secretary of the Dominion Board of Trade, as well as of the Board of Trade and Corn Exchange of Montreal, are to increase nearly threefold every department of the cotton manufacture, as appears from the following summary of the progress made between 1879 and 1883 :

	Seven mills in 1879.	*Twenty mills in* 1883.
Total capital employed	$2,100,000	$8.500,000
Aggregate raw material used per annum, lbs.	12,800,000	38,470,000
Quantity of cloth produced, yards	38,000,000	115,000,000
Approximate value of annual production	$3,745,000	$10,400,000
Spindles, number	134,000	472,000
Looms, number	2,940	9,950
Employees, number	2,265	10,200
Amount of wages paid per annum	$556,000	$1,110,000
Value of fuel consumed	$45,000	$215,000
Value of chemicals	$20,000	$125,000

In the manufacture of woolens, the census makes the following

exhibit, it being premised, however, that many of the woolen factories are of the very smallest kind, and that the number of mills will be likely to diminish, rather than increase, with the future expansion in the volume of business :

	Number.	*Capital.*	*Employees.*	*Production.*
Carding and fulling mills	439	$ 580,417	901	$1,498,343
Hosiery manufactories..... ...	83	630.821	1,556	1,385,730
Woolen cloth making..... ...	1,281	5,272,376	6,877	8,113,055

The lines of production in cotton goods are, besides the 115,000,000 yards of cotton cloths, brown sheetings and shirtings, bleached and fancy shirtings, apron checks, nuns' stripes, denims, ticks, ducks, cottonades, crochet and knitting cottons, beam warps for woolen mills, 8-4, 9-4, and 10-4 brown sheetings, drills, bags, wadding and batting, cheviots, canton flannels, shoe ducks and drills, pocketings, wigans, etc. In woolens they are tweeds, cassimeres, etoffes, flannels, blankets, serges, beaver, presidents, diagonal and nap coatings, shoe cloth.

Canada, therefore, has in four years built up a woolen manufacturing industry about equal to that of New Hampshire or New York in the value of its products, and exceeding the combined woolen industries of Ohio, Illinois, Indiana, Iowa, Wisconsin, and Michigan. The aggregate product of the woolen mills of the latter States is as follows :

Ohio.....	$1,084,323
Indiana.....	2,728,347
Illinois.....	1,896,460
Iowa	435,747
Michigan	481,517
Wisconsin	1,480,069
Total.....	$8,107,463

Yet the population of these six States aggregates 12,831,282, while the entire population of the Dominion of Canada is only 4,000,000 persons, or less than a third of these six States. Moreover, every one of these six States is better fitted for both growing sheep and manufacturing woolen goods than is any part of Canada, and has a larger market of purchasers.

Canada has bravely imposed upon herself the protective duties necessary to bring about this degree of industrial development. Yet the rise in Canadian prices of woolen and cotton goods is so slight that the strolling conventions of New York free traders, sent out annually to hold sessions in the Western States, continue to speak of Canada as the country of cheapness relatively to the

United States. In fact, however, the United States have long since reached low prices in both cottons and woolens through domestic competition, and the Canadians are content to expand their prices in some degree, if they see it to be necessary, to build up a diversified system of industry.

In 1884 the facts above stated for 1883 were extended and amplified in the report of the commissioners on the effects of the tariff for five years. The following is, in the main, their summary of its effect on the development of manufactures in the provinces of Ontario, Quebec, New Brunswick, Prince Edward Island, and Nova Scotia :

	1878.	1884.	*Increase.*
No. of hands,	42,794	77,346	34,552
Yearly wages,	$13,833,733	$24,396,165	$10,562,432
Capital invested,	$37,819,931	$67,293,373	$29,473,442
Yearly output,	$49,966,282	$102,870,166	$52,903,884
Industries visited,	1,501	2,135	634

The increases have therefore been as follows :

	Per cent.
Number of hands increased,	80.74
Yearly wages increased,	76.35
Capital invested increased,	77.96
Yearly output increased,	105.90

The industries embraced are the foundry business, the furniture, machinery, implements, iron, tobacco and cigars, knitting, leather, brushes and brooms, woolen, wooden, confectionery, boots and shoes, metals and tinware, paper, musical instruments, clothing, general industries, and cotton factories. The Canadian mode of gathering statistics shows both the increase in the capital, and the number of hands employed in the establishments existing in 1878, and the number of new factories. The increase in number of establishments and hands employed is from 50 to 100 per cent. in six years in nearly all the industries. In cotton factories it is greater, thus :

	Factories.	*Hands.*	*Wages.*	*Product.*	*Capital.*
Factories, 1878,	4	1,361	$276,000	$1,151,000	$1,800,000
Same factories, 1884,	4	2,126	445,000	1,872,000	3,350,000
New factories, 1884,	13	2,375	502,500	2 530,000	3,448,000
Increase of 1884 over 1878,	13	3,140	671,500	3,251,000	4,998.000

The number furnishing statistics is seventeen, four of which were in existence prior to 1879, and thirteen have been established since. The increase in the number of hands in this class has reached 210 per cent. The wages averaged $202.79 in 1878, and $210.28 in 1884.

The total increase distinguishing the old factories from the new, in all industries, sums up thus:

	Factories.	*Hands.*	*Wages.*	*Product.*	*Capital.*
Factories, 1878, . .	467	27,869	$8,174,900	$34,131,100	$26,160,500
Same factories, 1884, .	467	42,080	12,870,900	53,554,500	36,647,400
New factories, 1884, .	258	13,453	4,040,900	23,712,600	11,777,700
Increase of 1884 over 1878,	258	27,664	8,737,000	43,136,000	22,261,600

The Canadians claim to manufacture saws and some edge-tools for export to the United States. They are doubtless not wholly insensible to the fact that the reason why they are permitted to enact protective tariffs against England, while Ireland and India are not, is that, while theoretically they are under the paw of the British lion, potentially and influentially they are under the wing of the American eagle. Their particular freedom to enact protective tariffs, they owe much more to the potency of their geographical environment, than to the recommendations of their British cousins.

225. The Sheep and Wool.—The sheep is pictured as a source of wealth, closely connected with man's welfare, on the monuments of Egypt, is mentioned in the Vedas of India, in the Chinese Chou-King, the Persian Zend Avesta, and appears as an article of religious sacrifice in the fourth chapter of Genesis. Everywhere, therefore, he accompanies man on his entry into the historic period, and certain writers,* attempting to probe the mists of antiquity, perhaps, by the help of imagination, discern the first recorded social contest, in the preference of one class for the pastoral life, and of another class for tilling the soil. The triumph of the farmer over the shepherd is, they think, typified in the murder of Abel by Cain. If this fancy be true, the history most familiar to the western world opens with an economic contest between the two classes of workers.

It is believed that the merino sheep of Spain is descended from the Tarentine sheep of the Romans, which were known to the Romans as "Greek sheep," being remarkable for the silky fineness of their fleece. The Greeks and Romans owed much of their material wealth to their wool industry. One patrician bequeathed by will 200,000 sheep to Augustus. The farming of the Roman Empire was largely of the kind now known as "bonanza farming," or "great ranch" grazing.† Wool depends for its value much upon the progress made in the other arts, and espe-

* Goldziher "Mythology of the Hebrews."

† "The Fleece and the Loom," an address by John L. Hayes.

cially in scouring, and dyeing, in spinning and weaving, in navigation, loom construction, and ultimately in the iron and steel manufacture. The Roman purple was a woolen cloth, worth four dollars per pound before dyeing, and one hundred and sixty dollars per pound when colored with the Tyrian dye.* This dye has for many centuries been numbered among the lost arts, but in 1856 a new dye of perhaps nearly equal value was made from coal tar.

The woolen manufacture preceded banking, as the basis of the modern revival of industry and the consequent revival of art, in the twelfth and the thirteenth centuries, in Florence, Venice, Pisa, and Genoa. Then the woolen manufacture passed to the Netherlands, and from thence under Charles V. to Spain, France, and England.

In the time of Nero, according to Pliny, Babylonian couches woven of wool rose to a value of four million sesterces, or $640,000. The name of Spinner on our treasury notes, and of our great orator, Webster, indicate a descent from an ancestry of spinners and weavers. The American Wool Growers' Association is presided over by a president whose name, De Lano, indicates that his French ancestors were also wool-raisers.

Edward III., in the latter part of the fourteenth century, began the systematic encouragement of the wool industry by the English government. Prior to that time the English produced wool chiefly to sell to the Netherlands, making up only the commonest and coarsest of their own cloths.† One parliament was summoned expressly to encourage the wool product and manufacture of woolens. It prohibited the importation of cloth and the export of rams, and forbade the wearing of foreign cloth. Soon the prohibitions were changed to duties. So effective was the policy that, while at the beginning of his reign more than half the cloth worn in England was imported, in his twenty-eighth year the exports of cloth were three-fold the imports.

During the next five centuries three hundred and eleven statutes were enacted for the protection of the woolen manufacture.

---

* "The Fleece and the Loom," by John L. Hayes.

† The author of the "Golden Fleece" says of Edward III.: "He saw that the subjects of the Duke of Burgundy, receiving the English wool at sixpence a pound, returned it through the manufacture of that industrious people in cloths at ten shillings, to the great enriching of that state, both in revenue to their sovereign and employment to their subjects. He at once proposed how to enrich his people, and to people his new conquered dominions; and both these be designed to effect by means of his English commodity, wool."

The export of wool, after being several times suspended, was definitely prohibited in 1660, and so continued until 1825.* The exportation of fuller's earth, and of sheep, were forbidden under severe penalties. Sheep-shearing within five miles of the sea was forbidden, except in presence of a revenue officer to prevent the export of the wool. To prevent a monopoly of the profits of wool production, the number of sheep to be kept by one person was limited to 2,000. All burial shrouds were required to be of woolen, as well as all black cloth worn at funerals. But the export of woolen cloths was at length permitted free.†

Ireland, and the English plantations in America, were forbidden to export woolen cloths.‡ At first the wearing of Indian calicoes was forbidden, and when the cotton manufacture in England was getting well under way, British calicoes were still restricted to those of a blue color, lest they might interfere with the woolen manufacture. The East India Company would export none but British cloth, from its foundation to 1828. Portugal, which, until 1703, had supplied both her own people and Brazil with woolen goods, was cunningly induced by certain favors given to Portuguese wines by England to admit English woolen goods free. This ended the Portugese wool and woolen industry, and reduced Brazil to that industrial subserviency to England which is imperfectly offset by her affinities in race, religion, and language to Portugal.

For four years only, from 1819 to 1823, were the English wool-growers able to secure a duty on foreign wool of sixpence per pound.

Wool was styled "the flower and strength, the revenue and blood," of England. The lord chancellor of England presided over the House of Lords on a wool-sack, which gave its name to his office, as an emblem of the close association existing between the kingdom and its leading industry.§

Lord Bacon, addressing the ministers of his sovereign, said: "Let us advance the native commodities of our own kingdom, and employ our own countrymen before strangers. Let us turn

* "The Fleece and the Loom," by John L. Hayes, p. 13.

† 1st William and Mary. ‡ 10 and 11 William III.

§ The antiquitie of wool within this kingdom hath been, beyond the memorie of man, so highly respected, for those many benefits therein, that a customable use has always been observed to make it the seat of our wise learned judges, in the sight of our noble peers (in the Parliament House), to imprint the memorie of this worthy commoditie within the minds of those firm supporters and chief rulers of the land."—John May, 1613.

the wools of the land into cloths and stuffs of our own growth. It would set many thousands to work ; and thereby one of the materials would, by industry, be multiplied to five, ten, and, many times, to twenty-five times more in value, being wrought." A statute of William III. declares the woolen goods, naming their kinds, to be "the greatest and most profitable commodities of the kingdom."

In short, England, in like circumstances and with a like population, was saying then exactly what Canada and Australia are saying to-day, that the ability to make its own woolen clothing lies at the basis of a nation's industrial independence.

226. Wool a Finished Product.—It is the custom of manufacturers of woolen cloths to speak of wool as a raw material, because it is the raw material of their particular industry, and each industry, provided it confines the meaning of the term to its own uses, may properly speak of that which it buys for re-manufacture into some other product as its "raw material," and of that which it produces for sale as its "finished product." But this use of terms becomes delusive and misleading when it is applied to the industries of an entire nation, for therein whatever is the raw material of one industry must have been the finished product of some other.

In fact it is a slower and longer process, to evolve wool of a particular grade, than to convert the wool when produced into a garment. At a fair in Georgia, wool which was worn by a sheep at sunrise as his natural coat, was worn by the governor of the State at a ball on the same evening—having undergone in so brief a time all the intermediate processes of washing, shearing, scouring, dyeing, drying, spinning, weaving, measuring, cutting, lining, basting, sewing, fitting, and ironing. But the process of developing the sheep by climate, food, care, and breeding, into a particular variety, is one of years or even centuries.

The species is more susceptible of modification than any other animal except the dog, and as wool is capable of being transported to great distances without injury to its value, all the world may be said to compete in its production. Hence, the prime requisite of developing it is steadiness of policy over long periods of time. Subject to this condition, it has been said: "the breeder may chalk out on a wall a form perfect in itself, and then give it existence."* Hence, as Dr. Hayes remarks, "that distinctness and

* Lord Somerville, quoted in Bischoff on "Wool, Woolens, and Sheep," London, 1842, p. 380.

variety of fabric which characterize the wool manufacture; and thus we have the coarse Cordova and Donskoi wools for our carpets; the noble electoral wools of Saxony and Silesia for our broadcloths; the strong middle wools of the Southdown and our native sheep for blankets; the soft, long, and finer merino wools of France, Vermont, and Michigan for thibets, delaines, and shawls; the longer and coarser combing wools of the Cotswold and Leicester races for worsteds in their thousand applications; the very long and bright-haired lustre wools of Lincolnshire for alpaca fabrics; and, lastly, the precious silky Mauchamp wool, the recent triumph of French agronomic skill, rivalling even the cashmere for shawls and the angora for Utrecht velvets."

Wool is lighter in its actual specific gravity than cotton, linen, or silk,* is the best non-conductor of heat, and is the most indestructible and durable of all the fibres. Its value as wool outlasts every garment in which it enters, and in the form of shoddy forms a valuable ingredient in the manufacture of new and often of very fine cloth. Very much of the economy of the English wool manufacture, for 40 years past, has consisted in its more extensive utilization of shoddy.†

The fibre of wool is not like that of silk, hemp, flax, and cotton, a straight and structureless homogeneity, but is "crisped or spirally curled, and is made up of cells of different kinds, the interior forming the pith, and the exterior consisting of serrated rings imbricated over each other, having under the microscope the appearance of a series of thimbles with uneven edges inserted into each other, these serratures, as well as the spiral curls, being more or less distinct, according to the fineness of the fibre." ‡ This is the reason why wool alone of all the fibres can be made into felt, as in hats and broadcloths. Wool also receives and holds dyes persistently, and hence gives rise to garments which will wash without change of color.

227. Rate of Consumption of Wool.—About a pound and a quarter of wool are produced for each inhabitant of the globe; but in the richer countries, as France, England, and the United States, the consumption of wool reaches from four to seven pounds for each person per annum. It may be said that a nation which feeds as many sheep as it contains of human beings, will not need

* Hayes' "Fleece and Loom," p. 5. † Chambers' Encyclop. Art. "Wool."
‡ Hayes' "Fleece and Loom," p. 5.

to import wool for its own consumption. The United States, with 58,000,000 people and 45,000,000 sheep, imports about as much wool as from 3,000,000 to 13,000,000 more sheep would produce. Austro-Hungary, with 38,000,000 people and 14,000,000 sheep, needs more wool. France, with 22,000,000 sheep, is more dependent on imports for wool, and on exports for its markets of cloths. Yet the home consumers constitute, in the main, its market.

England in 1855, out of a total supply by production and importation of 250,000,000 pounds, retained for use in her manufactures 81½ per cent., and exported as wool 18½ per cent., leaving her somewhat more than six pounds per capita to supply both her manufacture for home use, and her export of cloths and clothing. The subsequent ratio of supply to consumption has been as follows, in millions of pounds: *

	1869.	1880.	1883.
Total Supply	466½	729½	732
Exported	129	254½	296½
Retained in Great Britain	337¼	475	435½
Per cent. retained	72¼	65	59½
Per cent. exported	27¾	35	40½

Meanwhile the growth of the export of woolen goods in quantity represents a considerable decline in value, and hence a corresponding decline in the power to support labor. Between 1880 and 1885 the value of the woolen exports of Great Britain declined from £129,000,000 to £85,000,000, and the number of persons employed in the manufacture has within 20 years declined by 5,000 persons. The consumption of wool in America now includes a domestic production of 370,000,000 pounds, and an importation of about 90,000,000 pounds, all of which is consumed in the manufacture of woolen goods for the wear of the American people without export. It seems that the consumption of wool, in actual wear in America, rises to about 6½ pounds per capita, or very exactly the same as the like consumption in the United Kingdom.

228. The Protection of Wool and Woolens in Europe.—In France the evolution of the woolen industry was closely resultant from and dependent on the action of the government. Colbert, the minister of Louis XIV., made attractive offers to foreign artisans, distributed 50,000 livres in encouraging the wool industry, and attracted Van Robais from Holland, by a patent issued to him for manufacturing fine cloths, after the fashion of

* J. L. Bowes & Bros.' Annual Wool Tables, 1883.

Spain and Holland. Thiers attributes the credit of introducing the manufacture of cloths into France to Colbert. He imposed heavy duties on the importation of foreign cloths, modified the wool of the French flocks by imported breeds, and is regarded by Carey as the father and founder of the Protectionist School of Statesmen. Under Louis XVI. merino sheep were extensively introduced into France. Once, in 1786, France was weak enough to enter into a treaty with England, whereby in exchange for certain expected favors in the admission of fine and high-priced French cloths in England, English low-priced goods were admitted at low duties into France. As the finer and more improved branches of any industry must always be the outgrowth of the previous success of the coarser and cheaper grades, a fatal blow was struck by this treaty at the entire woolen industry of France, from which the country had not recovered at the outbreak of the French Revolution of 1793.

Napoleon was as vigorous a protectionist toward wool as toward beet sugar. "Spain," he said, "has twenty-five millions of merinoes. I want France to have a hundred millions." * He established sixty additional sheep-folds for blending French with Spanish breeds. One of his chief military designs was to shut English manufactures out of Europe by a reciprocal blockade. Visiting the calico-printing works of Oberhampf, he said, "We both have a war with England, but I believe the noblest is yours." Indeed, protection has been thought a chief cause of Napoleon's success and popularity in France, as well as a leading element in his usefulness.

The Jacquard loom was the product of this inventive period. Dyeing was brought to high perfection. Great manufacturing towns arose out of the profits of newly born industries. By 1851 a million and a quarter persons were employed in the woolen manufacture in France, Germany, Austria, Russia, Spain, Switzerland, and Sweden, all strenuously seeking to nurture their flocks and spindles, by protective duties, against undue foreign competition.

Had the continental nations, at the close of the wars of France with the allied powers in 1815, given England free trade in woolen goods, she could have spun and woven, temporarily at a lower price than any of them, every pound of cloth needed on the continent. This temporary ability would have concentrated

* Berneville, p. 133. Hayes' "Fleece and Loom," 27.

the woolen manufacture, for all these countries, in England and would have deprived them of their own. Ireland, Portugal, Turkey, India, and to some extent China and Japan, were conquered, dragooned or purchased to adopt this policy. France, Spain, Austria, Russia, Switzerland, and Sweden owe their woolen manufactures to their adherence to the protective policy. Nor is there any doubt whatever, in the mind of any statesman, that the ultimate effects of this dispersion of industries among nations secures a more abundant supply to the people of each, at a far lower labor cost, than if the policy of immediate cheapness had been pursued. Cheapness in obtaining for a while a supply of a particular kind of goods is of very little value, when compared with cheapness in the processes whereby such goods are produced. The former is a transient good. The latter is a permanent good. The processes whereby products are caused to be, can only be made cheap by multiplying the circumstances under which they are produced, and the variety and number of the agencies employed to produce them. This is done, by the nations generally, when each protects its own industries.

Whether such protection is effected by laying out roads, so as to aid its producers in marketing their crops as cheaply as their competitors in other lands; or in educating its people so as to develop their capacity for skilled industry, in a degree equal or superior to that of other countries ; or in granting to inventors of new machines, authors of new books, and discoverers of new substances, processes, or compounds, the exclusive profits of their inventions for a term of years ; or whether it seeks, by import duties, to protect its industries, by securing to those who invest capital and labor in conducting them, at a period when the profits are rendered hazardous by foreign competition, a better hold on the home market than is given to the importer; or whether it maintains armies and colonies in various parts of the earth, and subsidizes the lines of steamers which communicate with them, so as to secure to the coercing nation the lion's share of the trade of these colonies, or of the nations of overawed and browbeaten barbarians among whom such armies and stations are established—all these are mere modifications of the form of protection, and all have but one end in view, viz., to adapt the mode of protection to the interests of the people of the dominant class, occupation, or country, never to those of the subservient country, class, or occupation.

It is in this broad sense that the policy of protection, to the

home industries of the class, occupation, and country which legislates, may be said to be the intended policy of all nations, and especially of Great Britain. The withdrawal of protection from farmers, so far from being an exception to this rule, illustrates it. The farmers had ceased to be, even proximately, the dominant class; the manufacturers thought it to be for their protection to take the duties off bread-stuffs, and as they outnumbered the farmers, their form of supposed and intended protection won.

229. Wool Culture in America.—The colonial period witnessed the colonial legislatures uniformly trying to develop wool growing and woolen manufacturing, while the British parliament was trying to repress at least the manufacture. Massachusetts bountied the killing of wolves, and Delaware and Virginia prohibited the exportation of sheep and of raw wool. The first general congress of deputies, meeting at Annapolis, in 1774, as well as the provincial congress of Massachusetts of the same year, the convention of Virginia, and the assembly of Pennsylvania, all adopted protective measures toward wool growing, and looking to its manufacture.

In 1800 the first merino stock was introduced, and a mill was erected for manufacturing "fine wool." In the restrictions on trade incident to the Napoleonic wars, in 1809, fine merino wool rose to $2 per pound, full-blood Spanish merinoes rose to $1,500 in special instances. Even as late as 1820, twenty-five merino sheep brought $5,900 in Philadelphia. Still, until 1824, no duty was imposed on the importation of raw wool. That act imposed a duty for the first year of 20 per cent., for the second of 25, and, after 1826, of 30 per cent. on all wool whose invoice price abroad exceeded ten cents, and on such 15 per cent. Mr. Thomas H. Benton tried to make it a progressive duty, increasing at 10 per cent. per annum until it amounted to 50 per cent., and then at 5 per cent. until it reached 70 per cent. Though the compromise act of 1833, and the acts of 1846 and 1857, reduced the protective efficacy of the duties on wool, its importation has never been free since 1824.

In 1810 the first wool had been exported from Australia, and in 1820 the export had risen to only 99,000 lbs. By 1830 it had reached 1,000,000 lbs, and the export from South America informed our fathers of that day that for us free wool would mean but little wool, and that of poor quality and dear.

A high price for wool can only be maintained in conjunction with a large woolen manufacture, and a large woolen manufacture requires both cheap power and cheap looms. As both cheap power and cheap looms depend largely on cheap iron and steel, the evolution of the woolen industry in the United States followed close on the heels of the growth of the iron and steel industry.

The following (in millions) shows the increase in number of sheep and pounds of wool since 1850 :

Census Years.	No. of Sheep.	Pounds of Wool.
1850.	$21\frac{3}{4}$	$52\frac{1}{2}$
1860.	$22\frac{1}{2}$	$60\frac{1}{4}$
1870.	$28\frac{1}{2}$	100
1880.	$43\frac{1}{2}$	$235\frac{3}{5}$

From 1867 to 1883 the duties on wools and woolen goods were, in the main, such as had been suggested and approved by the combined associations of wool growers and woolen manufacturers of the United States. The essential principles involved in this tariff were that it is more important that, as a whole, the tariff should be effectually protective than that its schedule should be simple in its construction ; that cheap wool, as a raw material for manufacture, could most surely be had by maintaining an active home production of wool ; that America is sufficiently diversified in soil and climate to produce all varieties of wool needed by our manufacturers ; and that the interests of wool producers, woolen manufacturers, and the American consumers of woolen goods, are identical when periods of moderate duration are considered. Each of these positions has been contested by the advocates of the free-trade theory.

The relative abundance of our total supply of woollen goods in 1860 and in 1880 appears as follows :

Year.	Population.	Foreign Supply.	Domestic Supply.	Total Supply	Supply per Head.
1860	31,443,790	$37,876,945	$61,895,217	$99,772,162	$3.17
1880	50,500,000	33,623,887	237,587,671	271,211,558	5.37

Mr. Bigelow states the increase more specifically as follows:

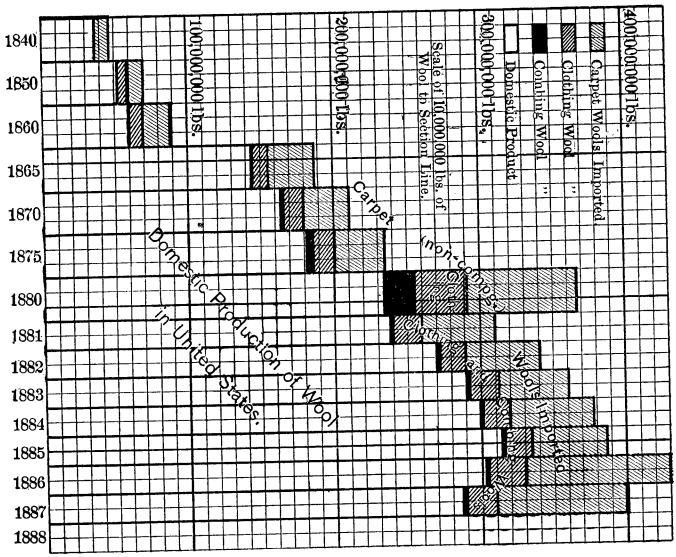
ITEMS.	1850.	1860	1868.
	Pounds.	Pounds.	Pounds.
Pounds of wool grown . .	52,516,959	60,511,343	177,000,000
	Value.	Value.	Value.
Value of wool imported .	$1,618,691	$4,842,152	$3,915,262
Value of wool manufactures imported . . .	17,151,509	37,937,190	32,400,759
Value of domestic wool manufactures	45,281,764	68,865,963*	175,000,000

Mr. John L. Hayes computes the rate of consumption per capita at $4.31 in 1860, and $6.52 in 1880.

What are the effects of existing duties on wool upon the American price? The duties, since 1866, have been from ten to twelve cents per pound on combing and clothing wools, and from two and a half to five cents per pound on coarse carpet wools. The latter is generally regarded as a duty for revenue only, as we do not produce the article. The former would raise the price by the amount of the duty, if our country were producing very little wool relatively to the quantity required—say a fourth, half, or even two-thirds of the competing grades. But, in fact, we produce nine-tenths of the competing qualities, and, if we produced the other tenth, our total production would make the price as low here as abroad, even if the duty were ten dollars a pound, or prohibitory. A duty on the importation of an article, which a country can have no need to import, because it produces as much as it desires to consume, can have no effect whatever on its price. The following diagram shows the ratio in weight of our home production of wool, of all kinds, to our importation. The greater part of the importation, as here indicated, is coarse carpet wools of a quality inferior to any we have yet sought to produce.

Wools are of so many grades that their prices will range all the way from ten to fifty cents in the same market. Hence the comparison of prices between different markets, or between two countries, is difficult, and can be made only by experts. Mr. John L. Hayes, in a defense of a reduction of the duty, in 1883, states that the combing and clothing (fine) wools imported in 1880 were 26,785,171 pounds. The customs returns show that these were invoiced at an average price of twenty-three cents per pound.

* Bulletin National Association Wool Manufacturers, vol. xvi, No. 1, p 80.



PROPORTION OF WOOL PRODUCED TO THAT IMPORTED.

Prices of wool were five cents lower in 1883 than in 1880. Yet the British Board of Trade returns show that the total import of wool of all grades and kinds, from Australia into England, in 1883, was valued at £17,066,476 for 326,517,520 pounds, or more than twenty-five cents a pound. Wool being five cents higher in 1880 than in 1883, as shown by the accompanying chart, it would follow that the average on all grades of Australian wool in England, in 1880, must have been thirty cents, or seven cents per pound higher than combing and clothing wools were invoiced at, to bring them to the United States. Allowing another five cents for the difference in price between the average of all grades and the fine, it would follow that the combing and clothing wools brought into New York at twenty-three cents, in 1880, should have had a foreign price of thirty-five cents, or twelve cents higher than the invoice. This would indicate that the handlers of Australian combing and clothing wools made a "dip" on them, to get them into American markets, of twelve cents, or the whole amount of the duty. While Australian wools were at this period quoted at "good to superior fleece-washed merinos 1*s.* 8*d.* to 1*s.* 10*d.* [forty to forty-four cents], and average to good 1*s.* 3*d.* to 1*s.* 8*d.* [thirty-

one to forty-one cents] per pound," and while Mr. Hayes, an expert, says that only the best long and fine wools (apart from carpet wools) are now imported, yet almost the entire quantity imported is invoiced at twenty-three cents per pound, a price which is three cents below the foreign price of blanket wools.

The conclusion is inevitable that the foreign price does "dip" by nearly or quite the whole duty, to accommodate itself to the American market, and, this being so, the president of the Wool Manufacturers' Association was right in testifying before the Committee of Ways and Means, of Congress, that the price of wool is not made higher by the duty. The Association was only wrong in making the duty on wool a part of the basis for estimating the duty on woolen goods. The duty on woolen goods should be estimated simply by inquiring the money rate at which the goods can sell in the foreign market, under the most favorable conditions, then the rate at which they can be manufactured here, and making the duty large enough to more than cover the difference at all times, and under all fluctuations in price.

The annexed chart shows the facts above cited, as to the prices of wools. The average invoice price of twenty-three cents per pound applies to all years since 1880.

The total wool product of the United States is now estimated at 320,000,000 pounds,* which, adding 95,000,000 pounds for importation, amounts to 415,000,000 pounds for 58,000,000 of people, or $7\frac{1}{16}$ pounds per capita per annum. The consumption of wool in 1860 could hardly have reached one-half as many pounds per capita. This goes far to sustain the theory that an abundant consumption is best attained through an abundant home production.†

230. Woolen Industry of England.—Toward the close of the eighteenth century England, owing to the persistency which she had shown in developing her iron and steel manufacture, plunged into a series of inventions in mechanics which brought her into the front rank of nations as a manufacturer of woolen goods, and, at the opening of the present century, in cottons. These were the steam-engine by Watt, which for the first time superseded human power by steam power, and converted capital

* Helmuth, Schwartze & Co.'s Circular, published by George William Bond in 1887, estimates product of North America at 460,000,000 pounds.

† Since 1884, however, owing to the threatened sacrifice of the wool producers, implied in the reduction of the duties on wool in 1883, the number of sheep in the United States has declined by about 6,000,000, or by 7.37 per cent. (Report for 1887 of Pennsylvania Wool Growers' Association.)

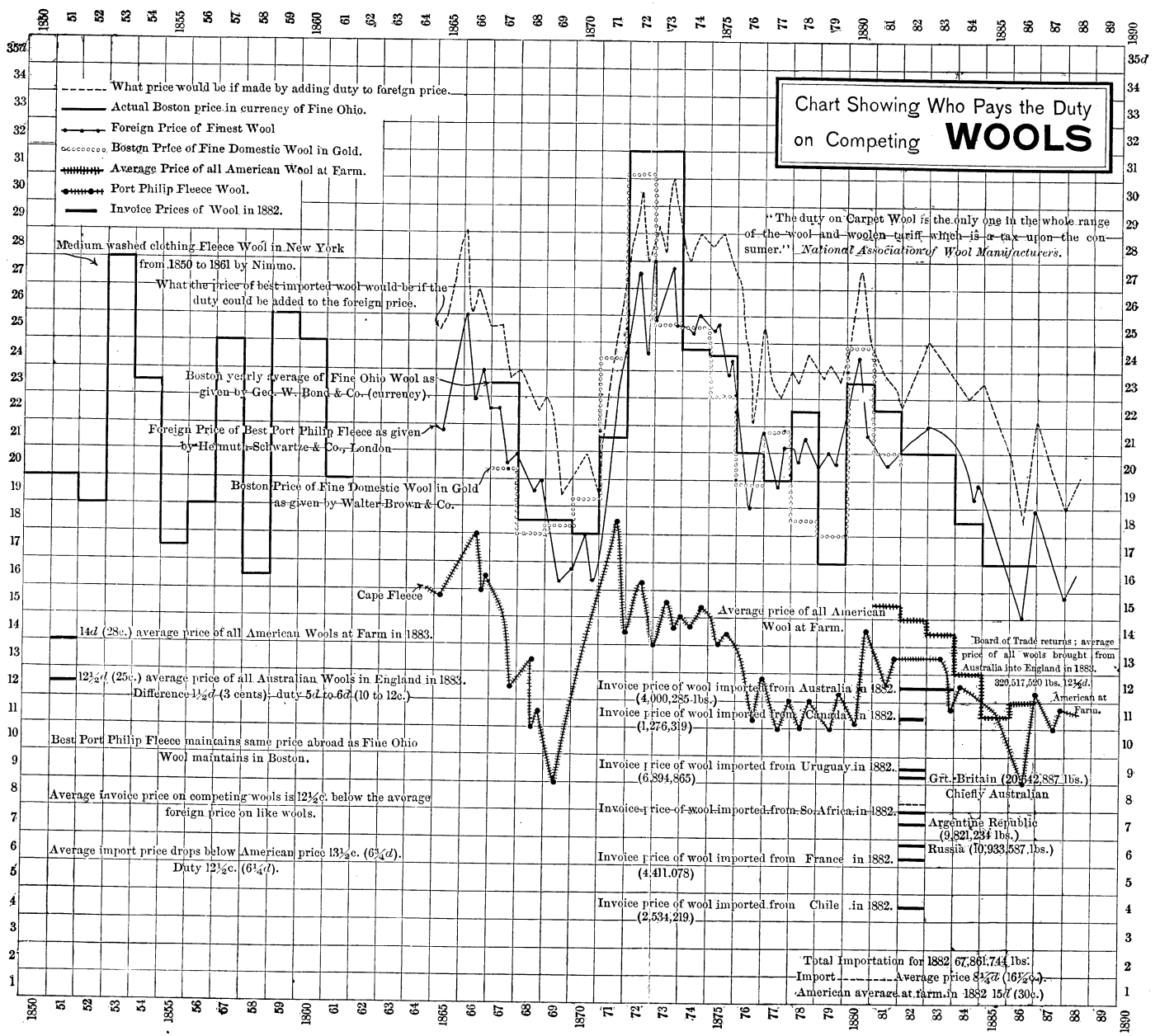


Chart Showing Who Pays the Duty on Competing WOOLS
What price would be if made by adding duty to foreign price.
Actual Boston price in currency of Fine Ohio.
Foreign Price of Finest Wool
Boston Price of Fine Domestic Wool in Gold.
Average Price of all American Wool at Farm.
Port Philip Fleece Wool.
Invoice Prices of Wool in 1882.
"The duty on Carpet Wool is the only one in the whole range of the wool and woolen tariff which is a tax upon the consumer." National Association of Wool Manufacturers.
Medium washed clothing Fleece Wool in New York from 1850 to 1861 by Nimmo.
What the price of best imported wool would be if the duty could be added to the foreign price.
Boston yearly average of Fine Ohio Wool as given by Geo. W. Bond & Co. (currency).
Foreign Price of Best Port Philip Fleece as given by Helmuth Schwartze & Co., London
Boston Price of Fine Domestic Wool in Gold as given by Walter Brown & Co.
Cape Fleece
Average price of all American Wool at Farm.
14d (28c.) average price of all American Wools at Farm in 1883.
12½d (25c.) average price of all Australian Wools in England in 1883.
Difference 1½d (3 cents) duty 5d to 6d (10 to 12c.)
Best Port Philip Fleece maintains same price abroad as Fine Ohio Wool maintains in Boston.
Average invoice price on competing wools is 12½c. below the average foreign price on like wools.
Average import price drops below American price 13½c. (6¾d).
Duty 12½c. (6¼d).
Board of Trade returns; average price of all wools brought from Australia into England in 1883. 320,517,520 lbs. 12½d.
American at Farm.
Invoice price of wool imported from Australia in 1882. (4,000,285 lbs.)
Invoice price of wool imported from Canada in 1882. (1,276,319)
Invoice price of wool imported from Uruguay in 1882. (6,894,865)
Grt. Britain (20,542,887 lbs.) Chiefly Australian
Invoice price of wool imported from So. Africa in 1882.
Argentine Republic (9,821,234 lbs.)
Russia (10,933,587 lbs.)
Invoice price of wool imported from France in 1882. (4,411,078)
Invoice price of wool imported from Chile in 1882. (2,534,219)
Total Importation for 1882 67,861,744 lbs.
Import Average price 8¼d (16½c.)
American average at farm in 1882 15d (30c.)

into the cheapest of all laborers—cheaper even than coolie labor; the roller-spinning of Paul, adopted by Arkwright, dispensed with finger and hand-work in spinning, and drew and twisted the fibre in a continuous thread by an automatic mechanism; then came the jenny of Hargreaves, which, instead of one, drew seventy threads at once; then the mule of Crompton, which increased the power of the spinner a hundred-fold; and the power looms of Cartwright, which quadrupled the power of the weaver. Then came the factory system of Arkwright, which, by gathering many looms under one control, intensified production and in many ways saved labor, while it lessened, perhaps, the individuality and independence of the workers. Finally came the gig-mill by Mr. Gott, raising the wool on the cloth without manual labor, and the shearing frames, worked also by power. By these inventions the consumption of wool in Great Britain rose to 94,000,000 pounds of domestic wool, and 8,000,000 imported, by the close of the last century. By 1851, according to M. Bernoville,* the annual consumption had grown to 208,000,000 pounds, or more than double. In 1883 the total supply for the United Kingdom had grown to 732,000,000 pounds, of which 296,000,000 were exported, leaving 435,000,000 pounds for domestic consumption. Though this gives the British people as large a supply of woolen goods, per capita, as is obtained by those of the United States, the source of that supply is increasingly foreign in England, and increasingly domestic in America. In England the wool grown in the kingdom declined from 140,000,000 in 1855 to 128,250,000 pounds in 1883, while the imports increased five times. In America the imports both of wool and woolen goods have remained stationary, or declined, while the domestic production has increased tenfold and the consumption about threefold. The inference is that the English wool and woolen industries are gradually leaving England to take up their abode in protective countries.

So far as this transfer of industry is coincident with a like migration of English population to new countries, it may be ascribed to the various causes which help to make populations migratory, the chief of which is the migratory nature of profits. But so far as the rate of transfer exceeds that of population, and especially so far as the rate of transfer of a particular industry from a country wherein it is not protected by tariffs to one where

* "Industries des Laines Peignées," par M. Bernoville, p. 11.

it is so protected exceeds the rate of transfer of industries which are equally protected in both countries, such increased rate may, in the absence of the clear indication of other adequate causes, be fairly ascribed to the difference in the protection extended to them.

Thus a period in which the British carrying trade, or commercial marine, is actively protected, and the American is not, is marked by a transfer of American vessels and sailors to Great Britain; though if in the same period British farmers, wool growers, and silk weavers are inadequately protected, and Americans in the same walks of life are either naturally or artificially protected in an adequate degree, a transfer takes place of British farmers, wool growers, and silk weavers to America, above the ordinary migratory tendency of industry.

231. The Cost of Protection to the Woolen Manufacture.—Among the familiar impositions of the free traders, is that of estimating the cost of protecting a domestic industry, by assuming that the whole domestic product is raised in price by the amount of the duty, or by some large percentage of that amount, and that it could all be obtained by importation at the price it sells for abroad when no importation occurs. Mr. Springer, of Springfield, Illinois, has worked up the cost of protection to the American woolen manufacture, on this basis, as follows:

Value wool imported 1882.	Duty received.	Average *ad valorem* rate.	Value home products consumed 1880.	Incidental taxes, being increased cost to consumers.
$47,679,502	$29,254,234	61.36 per cent.	$267,182,914	$106,873,165

As the wages paid in the manufactures of woolen goods amount to only $47,351,628, an argument is thus made out that it would be cheaper, to pay all these employees their wages, and to this might also be added the dividends paid to the mill-owners, than to pay the increased cost to consumers. Mr. Springer, however, impeaches all these figures, resolving them into solemn guesswork, by admitting that the domestic price is not increased by the amount of the duty, and that he does not know, and has no means of knowing, by what amount it is increased, or that it is increased at all. All this is admitted in the following words, which are Mr. Springer's, and which are uttered by him, not to give away his case, but to save it. He says:

"It will be seen, from an examination of the statement, that the rate of increase in the cost of the home product, by reason of the tariff, has been estimated in each case at much below the duty itself. This is due to the fact that many of the articles are increased in price only to a limited extent by reason of the tariff."

All these figures, however, lose their value as means of estimating the cost of the tariff, when the principle upon which they are marshalled is conceded to be false. This principle is that the price of the domestic product is raised by the amount of the duty. This Mr. Springer admits is false, by taking a different standard, viz.: a certain percentage of the duty, the rate of percentage being the result of pure guess-work on his part. Thus all this cumbrous superstructure of pretended argument from figures rests, at bottom, on a guess. The attempt to compute the exact cost of protection, like the attempt to prove the net profit derivable from law, education, internal improvements, or any other function of government, shades rapidly off into quantities that are immeasurable. It belongs to the domain of intellectual jugglery.

The problem of the relation of the cost of protection to its advantages is one that appeals to the sense of value, or profit-perception, or business judgment of all men. The production, per capita, of wool and woolen goods in the United States, has about doubled in the protective period since 1860. The common sense of common men, and the special sense of statesmen, concur in holding that this more abundant production renders the American market as low-priced a market, on most kinds of woolen goods, as the world contains. Practical merchants having a close knowledge of markets concur in this opinion. Hence, the tax of protection, while not actually computable, and while it is liable to undergo a theoretical variation with every change in prices, is really nominal on all varieties of goods that have had any considerable period for development under its influence.

232. Cotton—Antiquity and Modern Growth of the Industry.—The cotton of commerce is produced by about twenty species of the genus Gossypium, in all of which the cotton wool is attached to the seed, for the physiological purpose of promoting the distribution of the seed, as thistle-down distributes the thistle seed. Most of these are flowering herbs approximating to the hollyhock more nearly than to any other northern flower. The exceptions are the sacred cotton tree of the Hindoos, which produces a fibre used only in preparing the robes of the Brahmin priests, as its tripartite thread is held to be a sacred em-

blem of the Trinity, and the cotton tree of ancient Peru and Mexico, from whose product Cortes was presented with cotton garments, on his arrival in 1519.

Cotton was largely used in the domestic manufactures of India five centuries before the Christian Era, and therefore twenty centuries before it was largely raised, spun, or woven in the European world. Its culture and manufacture reached China about B.C. 200. Its extension to Turkey, Egypt, and Africa has been made since its culture in the United States made it a leading article of modern commerce,

The Hindoo used the distaff and the fingers in spinning, and a few sticks, the limb of a tree, a hole in the ground for his treadles and feet, constituted his entire loom during twenty centuries. But so great was his industry that "in every village, every woman and child was at work, making a piece of cloth," says Orme, and the muslins of Decca were so finely woven that they were described as "webs of woven wind."

It is disputed whether the manufacture of cotton in Europe was brought to Italy during the Crusades, or to Holland by the Dutch after the latter had passed to India by the Cape of Good Hope. The former is the better view, as Holland imported cottons from Italy before her ships rounded the cape.

The cotton manufacture began at Manchester, England, before 1640, as an adjunct to the linen manufacture previously carried on, but had hardly any growth until 1760 and later. The invention of the spinning jenny by Hargreaves, in 1770, was the beginning of the cotton industry in England. The invention created such alarm among the spinners, whose labor it displaced, that they first broke into Hargreave's house and destroyed his machine, and afterwards, when the jenny had begun to come into general use, they had a great uprising of the people, and, scouring the country, broke every curling and spinning machine they could find in Lancashire. In 1769 to 1772, Arkwright followed with the invention of the spinning frame, water frame, or "throstle," as it was variously called, which performs the whole process of spinning itself, leaving to the workmen only to feed it with material and piece the thread when it breaks. In 1785 the steam-engine was first applied to drive the machines for spinning cotton. At this period the raw material, or as it was for many years called the "cotton wool," or more briefly the "wool," came from

* Encyclopedia Britannica, Art. "Cotton."

the British West Indies, Brazil, Smyrna, etc. In the same year, 1785, a clergyman named Cartwright, who had never seen a person weave, invented the power loom, being stimulated thereto by the suggestion that the spinning machine would soon spin so much yarn that hands enough never could be hired to weave it. He had seen an automaton machine play chess, and as all the movements in weaving were reducible to three, he thought a machine could make them. When first broached, the idea was combated as visionary, by every person familiar with weaving.

Until these inventions came into use cotton goods were dearer than woolen, and too dear for general use. About 1795 a canal brought cheap coal to Manchester. Her small wares were sent out on pack-horses, into the villages of England, and sold by chapmen, in the inns. The whole cotton trade was still in the germ, but from 1795 it grew rapidly. By 1800 it consumed 100,000 bales and exported $27,000,000 worth of manufactured cottons. Now 3,000,000 bales are required, and the export of manufactured cottons has grown to $337,500,000. The period of greatest rapidity in the growth of the cotton industry was from 1795 to 1855. In 1817 it employed 110,763 persons in Great Britain. In 1835 it employed 220,134 persons, or more than there were in 1880 employed in the same industry in the United States.* The cotton-spinning kingdom had fifty years the start, as a manufacturing power, of the cotton-growing republic, and yet this start had all been won in the preceding forty years.

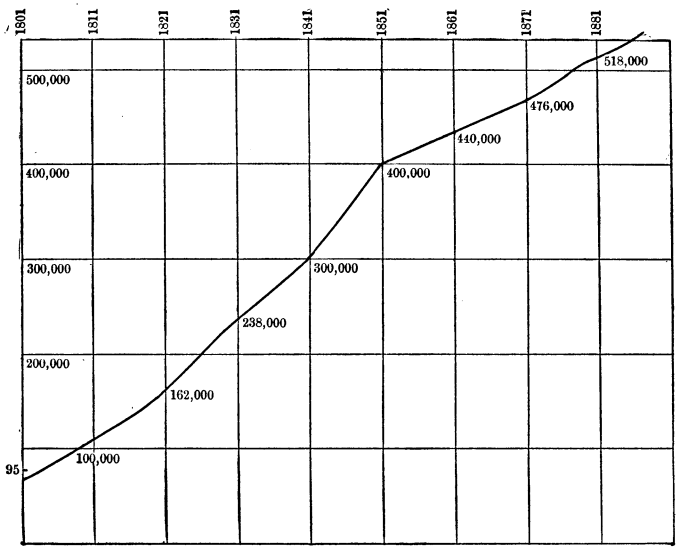
The rate of growth of the cotton industry in England is almost identical with that of the city of Manchester, for about eight-ninths of all the people employed in the industry in England were employed in, and formed a part of the growth of, the city of Manchester, since 1800.†

The cotton industry in England results in an export four times as great as the domestic consumption. In 1876 the annual value of the exports of yarn and cloth were £72,079,000, while the home consumption amounted only to £17,777,000. It is this industry which more than any other, except banking or the lending of money, compels England to pursue an aggressive policy in pushing her foreign markets and defending her foreign trade at every point. It is this desire to protect and defend her foreign trade, that causes the drum-beat of her morning reveille to ac-

* Robert P. Porter, "Breadwinners Abroad," p. 91.

† Manchester, including Salford. Porter's "Breadwinners," p. 91.

company the sun, without ceasing, in his circuit around the world. For behind the British drummer everywhere is the

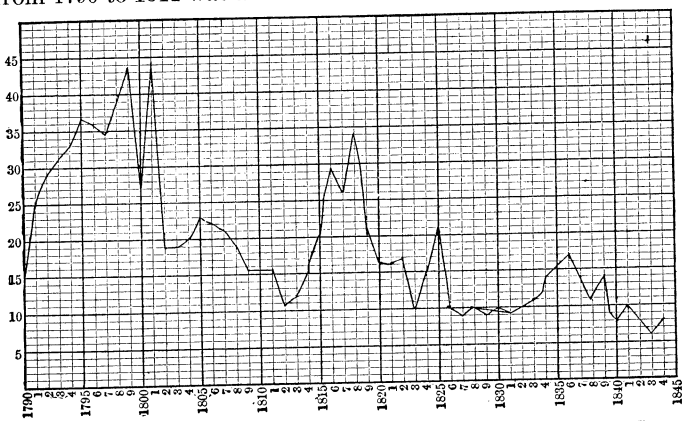


GROWTH OF THE CITY OF MANCHESTER.

British trader, who employs the drummer, and pays for the beating of the drum out of the profit on his exports.

233. The Cotton-Growing Industry in the United States.—To encourage the production of raw cotton, or as it was at first usually called "cotton wool" in the United States, a duty of three cents per pound was laid on its importation in 1790, and this duty, with slight variations in its amount, continued until 1846. A doubt was expressed whether such a duty could prove advantageous, as the prospect that the cotton plant could succeed in the South was deemed precarious. In 1792 Eli Whitney invented the first machine for ginning or separating the seeds from the lint or down. Whitney's "saw gin" consists of a series of saws revolving between the interstices of an iron bed, upon which the cotton is placed so as to be drawn through, whilst the seeds are left behind. This invention lessened greatly the cost of getting the fiber ready for shipment, and immediately caused the cultivation of cotton to become profitable. In 1799 the export had risen to 9,000,000 pounds, in 1817 to 95,000,000 pounds, and in 1845 to 872,000,000 pounds. The protective duty was probably not needed after 1798.

The average price of cotton per pound for the half century from 1790 to 1844 was as follows :



PRICES OF COTTON FROM 1790 TO 1845 IN CENTS PER POUND.

A general identity will be observed between the fluctuations in prices of cotton here indicated and those of breadstuffs in England and America set forth in ch. iii., p. 124. The general decline in price of cotton, between 1800 and 1845, results from the increase in quantity produced ; this increase was so marked, and its effect on the price so evident, as to give rise to the saying that the more cotton the planter sent to market the less he got for it, while the smaller his crop the greater his returns.*

The high price of cotton between the years 1815 and 1820, concurring with a rapid expansion in the production, caused an advance in the price of negro slaves in the United States in 1820 to 1830, so that the rearing and breeding of slaves, and the internal trade in slaves between the slave-raising and the cotton-growing States, became very profitable. This in turn gave a rapid accession of political power to the slaveholding interest, which was at the same time the free-trade interest. Hence from 1820 to

* Dr. H. C. Carey, "Social Science," by McKean, p. 262, shows that

In 1815-16	a crop of	80,000,000 lbs.	brought	$20,500,000.
" 1821-22	"	134,000,000 lbs.	"	21,500,000.
" 1827-29	"	236,000,000 lbs.	"	26,000,000.
" 1830-32	"	280,000,000 lbs.	"	28,000,000.
" 1840-42	"	616,000,000 lbs.	"	55,000,000.
" 1843-45	"	719,000,000 lbs.	"	51,000,000.
" 1849	"	1,026,000,000 lbs.	"	66,000,000.

In short, twelve and one-half times as much cotton in 1849 as was produced in 1815 brought only three and one-third times as much money.

1860 cotton growing, slavery, and free trade became closely knit together into one principle. This it was which repealed the Missouri Compromise in 1820, battled for the equality of slavery with the wages system from 1820 to 1860, threatened secession and a dissolution of the Union in 1828 to 1830, and after thwarting the protective policy from 1833 to 1860, except during an interval from 1842 to 1846, finally broke out into the civil war of 1860 to 1865.

The considerations underlying the entire struggle were economic. The armies that met on the Rapidan, and at Vicksburg, represented opposing economic theories. The constitution of the attempted Confederate States solemnly provided that no protective tariff should ever be enacted in those States, or by that government. The Confederacy was only to differ from the Union, in making slavery the normal condition of labor, and freedom from protective duties the natural right of commerce.

It is an impressive truth that the free trade, thus contended for, destroyed the Confederacy. The lack of the gold revenue, which would have come from a protective tariff if the South had had competing manufactures, rendered the bonds and notes of the Confederate States worthless. The lack of the manufactured goods greatly impaired their military strength. The conviction became far more general in the South after the war, that no nation can afford to depend upon the production, by another nation, of any of the forms of wealth essential to a nation's defense in war. The feeling of dependence on cotton, expressed by the saying "Cotton is king," gave way to the feeling that money is king. The Northern States, by their greater diversification of industries, actually grew richer in the midst of the expenditures which so impoverished the South. Of this diversity of industries money is the symbol and agent.

234. Cotton as a Power in Politics.—The political effects of the rapid expansion of the cotton manufacture in England, from 1800 to 1855, were as important as were those of the equally rapid expansion of the cotton culture in the United States. It engendered the ambition of England to become the workshop of the world and to convert all other nations into consumers of her products and producers of her food and raw materials. In pursuit of this policy she sacrificed her farmers, and yeomanry of Ireland and Scotland, at the shrine of foreign trade. The nature of her success will be seen, by observing how much more largely her trade lies with nations which she is able to command

with her guns, and whose tariffs she regulates by treaties obtained by aggressive war, or by more or less open purchase, than with nations whose power enables them, and whose intelligence inspires them, to admit or exclude her goods at their own pleasure.

In 1881 British cotton piece goods were shipped to countries whose trade is commanded by treaties which are the product of former wars, coercion, or purchase, as follows :

To Coerced and Treaty-bound Countries.		To Free Countries.	
To Turkey	$23,468,506	To France	$4,973,266
To Egypt	7,755,935	To Italy	6,344,745
To Brazil	14,501,444	To United States	7,521,409
To foreign West Indies	6,154,888	To Argentine Republic	5,864,570
To China and Hong Kong	29,105,947	To Chili	5,257,542
To Java	5,176,369	To British North America	4,599,664
To India, Ceylon, and Singapore	93,571,981	To Australia	8,187,015
	$179,735,070		$41,748,211
To other countries			$64,762,159

Nearly five times as much of the foreign trade of England in cotton piece goods now lies in countries whose legislation she is able to shape, and does shape, by coercion or other means, as in those which are independent of her control. No other element of the English export trade has exercised so aggressive an influence over English politics as this export of cotton goods. To it are due the establishment of an empire in India, the repeal of the corn laws in 1846, the British naval and commercial policy, and much of British colonial finance.

235. The Cotton Famine of 1860–5.—Society by an involuntary economic law, acting only through the impulse of dealers towards profits, economizes in the use of any essential of life of which the supply is cut off, by means of a rising scale of prices. This was shown in the cotton famine, produced by the civil war in the United States, in 1861 to 1865. The year 1860 had been the year of greatest production ever known in cotton goods. Two thousand six hundred and fifty mills, employing 440,000 hands, were running 30,000,000 spindles and 350,000 power looms. Of 1,390 million pounds of cotton imported 1,054 million were worked up in Great Britain. Twenty-four million pounds' (sterling) worth annually of cotton goods were consumed in Great Britain, and a value twice as large was exported.

In the year 1861 the price of middling Orleans rose from $7\frac{3}{4}d.$ to

12*d.* per lb. This shut off the profits of spinning and weaving until an unusually large stock of goods on hand could be sold off, as the manufactured goods did not rise in price as rapidly as the raw materials. Moreover, though the quantity of raw cotton in store was greater than ever before, the ratio of its price to that of the goods was such that it could not be made up at a profit, and hence the mills were rapidly closed or put on short time. In 1862 relief funds were subscribed, and soup kitchens were opened, furnishing soup at 1*d.* per basin. From half to three-fourths of the employees in the different mills were out of work. About $1,000,000 was subscribed to keep the workers from starving. In May cotton rose to 15*d.*, and in October to 2*s.* 3d. per lb., and more profit could be made by buying to hold than by manufacturing. At Christmas 352,000 persons were out of work, and £40,000 per week were distributed in relief. Not until May, 1863, did the manufactured goods on hand climb up to prices at which the raw cotton could be spun and wove at a profit, when it was worth 2*s.* 5d. per lb. in the bale. Then the manufacture was gradually resumed. The following schedule, of the prices obtained for the quantity of raw cotton imported, shows that, the smaller the quantity obtainable in any except one year, the larger was the sum of money which measured its aggregate value :

Year.	Quantities (cwts)	Value.
1860	12,410,000	£35.757,000
1861	11,223,000	38,653,000
1862.....	4,678,000	31,093,000
1863	5,978,000	56,278,000
1864...	7,976,000	78,204,000
1865.	8.732,000	66,032,000
1866..	12,296,000	77,521,000

The high price of cotton was divided by being spread in part over silks, woolens, linen, hemp, and even jute, straw, paper, etc., all of which were called on, in part, as substitutes. The rise which remained was sufficient to withhold it entirely from use, until the stocks previously manufactured had been worn out, thus dividing the rise in price over the largest quantity of goods and the longest possible period of time. In this way the hardships of the famine, though severe, were minimized to the utmost extent possible, until the supply returned. The cold operation of speculative selfishness thus had the effect to save the cotton on hand and prevent its waste. This form of economy, was therefore, as benevolent in its effects as the feeding of the hungry with

cheap soup. Students of political economy, in accounting for the prices of textile fabrics in Europe or America from 1861 to 1870, will be careful to unite with such other causes as they may have in view, the all-controlling influence of the cotton famine, and the large issues of paper money in the United States, and of debt in Europe.

The imports of cotton goods into the United States, in certain lines, are more than three times as great in value as the exports of cotton goods in other lines. The former are $36,000,000, and the latter $13,000,000 annually. Our imports are most largely of hosiery, and our exports most largely of sheetings and prints. The cotton manufacturers of New England were among the aggressive advocates of the protective policy in the early days of the republic, or from 1790 to 1850. For thirty years past, however, the classes of cotton manufacture which were able to live, were also able to export in free competition with English manufacturers. While steadily urging the necessity of securing the home market to American producers, they have not sought actively to supersede the importation in those lines in which the former held the field.

The success of foreign hosiery, and certain other forms of cotton manufacture, in keeping their hold on the American market is due to the admission of them at low and encouraging rates of duty, which have repressed the effort to substitute the American for the foreign article in those lines.

236. Destruction of Quinine Manufacture in the United States.—To descend from the great cotton industry to the little manufacture of quinine out of cinchona bark, is like a step from the infinitely great to the infinitely little. Quinine, however, possesses economic importance as the one and only article which, as a sop to an agitation extending over twenty-five years, in behalf of "tariff reform," was, in 1879, taken out from under a duty which had the effect to protect the manufacture in the United States, and was placed upon the free list. There were, at the time of the repeal of the duty, five American firms, and thirteen European firms, engaged in the manufacture. It had first been placed under a duty of fifteen per cent. during the presidency of Jackson, in 1832, which had been raised to forty cents per ounce in 1842, restored to twenty per cent. in 1846, changed to fifteen per cent. in 1857, to twenty per cent. in 1861, to forty-five per cent. in 1862, to twenty per cent. in 1872, where it continued until made free.

The article is made from a bark obtained chiefly in Peru, and which European as well as American manufacturers import free. The rate of production is very variable, and hence the price of quinine varies chiefly according to the price of the bark. Under the various duties above named, the following was the range of prices for twenty-five years :

In 1857 it sold	as high as $2.00	and as low as $1.40	per oz.
In 1860 "	as high as $1.80,	and as low as $1.20.	
In 1862 "	as high as $2.90,	and as low as $2.25.	
In 1864 "	as high as $3.75,	and as low as $2.60.	
In 1865 "	as high as $3.40,	and as low as $2.20.	
In 1877 "	as high as $4.50,	and as low as $2.70.	
In 1881 "	as high as $3.25,	and as low as $1.90.	

In short, in each year it varied in price, by an amount several times greater than the duty, which variation, therefore, could not have been an effect of the duty. In 1877, when the special agitation was raised against the duty as a "tax on invalids," the quinine was selling for $4.12½ per ounce in London, which was $2.59 higher than it had sold for in London one year previously. On this cry the duty was repealed. Four years after its repeal quinine sold as high as $3.25 and as low as $1.90, which was seventy cents higher than it had sold for when under a duty in 1860.

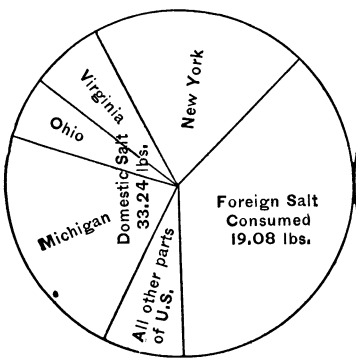
The price on both sides of the ocean rose and fell chiefly with the price of the bark. The effect of the withdrawal of the duty was that the American manufacturers, who had imported 6,389,-378 pounds of bark for manufacture in 1878, imported only 3,639,-315 pounds in 1883, and afterward a continually diminishing quantity. Meanwhile our importation of the sulphate of quinine rose at the following rates, our American invalids being each year more dependent on the imported article:

In 1877 we imported		75,804	ounces.
In 1878 "	"	17,549	"
In 1879 "	"	228,348	"
In 1880 "	"	416,998	"
In 1881 "	"	408,351	"
In 1882 "	"	794.495	"
In 1883 "	"	1,055,764	"

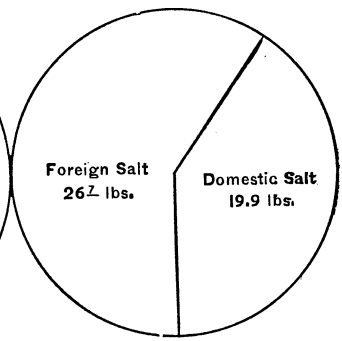
In short the repeal of the duty, exactly as in the case of the repeal of the English duties on breadstuffs, while it makes no permanent change in the price of the breadstuffs, operates effectually to transfer the seat of production from the home country to the foreign.

237. The Salt Industry as Related to the Tariff.—The manufacture of salt in the United States depends largely on protective legislation by Congress, and by the several States for its existence; yet its history is full of proofs that thus to protect the domestic manufacture cheapens the supply, and that a repeal of the duties only raises the price of salt abroad instead of reducing it at home. Every State in the Union, and probably every country on the globe, contains the means of making salt. In 1880, out of a total consumption of 52⅓ pounds per capita for the American people, 19 pounds were foreign salt imported, 33⅓ pounds were domestic, of which 9.7 pounds were produced in New York, 3.46 pounds in Virginia, 2.95 pounds in Ohio, 13.87 pounds in Michigan, and 3.20 pounds in all other parts of the United States. The following diagrams exhibit the expansion in the production relatively to the importation in forty years.

SUPPLY PER CAPITA IN 1880.



SUPPLY PER CAPITA IN 1840.



In the fifty years ending in 1880, the supply of domestic salt increased by 14.1 pounds per capita, the supply of foreign salt diminished 3.8 pounds per capita, and the total supply of salt increased by 10.25 pounds per capita. The price of domestic salt during this period declined in about the ratio of its increased abundance per capita, viz., from 21 cents per bushel to 16½ cents, while the average foreign invoice value per bushel declined only from 12½ cents per bushel in 1830, to 10⅔ cents per bushel in 1880. So much foreign salt can be brought in ballast, free of freight, to the United States, that ocean transportation adds little or nothing to the cost of foreign salt.

On March 3, 1807, a duty of twenty cents per bushel which had existed since 1800 was repealed. The country enjoyed the benefits of free salt, at $2 per bushel! * In 1809, and later, after the war of 1812–15 set in, it rose to $4 per bushel. During neither of these periods would the cost of production have exceeded thirty-five cents per bushel, if the interval of free trade in salt had not destroyed the domestic establishments. The cost of salt, for the three years of war, was thus made equivalent to what an equal supply for thirty-three years would have cost, had proper establishments for making salt been maintained.†

In Texas and Louisiana are some of the finest beds of mineral salt in the United States, wherein salt can be obtained with fewer hours of labor per bushel than at any of the foreign salt producing points, but not at so low a money price. The South, being always most dependent on the foreign supply for salt, expected to get cheap salt through a secession from the Union in 1860, as one of the economic advantages of that undertaking.

Practically, however, the war of 1861 to 1865, and the blockade of the Confederate ports, gave the Southern States so vigorous a protective policy that the salt manufacture at the Grand Saline in Texas alone soon employed 3,000 men. As in 1807 to 1815, so again in the Southern States in 1861–5, the cost of four years of salt certainly exceeded any sum that thirty years of salt supply could have cost, under a diversification of industries arrived at, during peace, by tariff duties. Indeed, the inability of the Southern States to supply themselves promptly with salt, quinine, iron and steel ware, and clothing, were among the chief material causes of their overthrow in the military struggle.

Protection to the salt manufacture, by tariff duties, has been offset by State taxes on the product, in a degree that is not usually allowed for. Thus, from 1813 to 1830, though the duty was twenty cents per bushel, the State of New York, where alone the manufacture had got a start, levied a tax of twelve and one-half cents per bushel, thus reducing the protection to seven and one-half cents. In 1830 the duty was reduced to fifteen cents per bushel, leaving a protection of only two and one-half cents, and from 1832 to 1834 the State tax was two and one-half cents higher than the duty, thus virtually fining the domestic producers two

* Bishop's "History of American Manufactures."

† Report of Committee on Salt to National Convention for Protection of American Interests, held at New York, April 5, 1841.

and one-half cents per bushel, relatively to their foreign competitors, for doing business in New York, instead of abroad. In 1834, the duty having fallen to 9.4 cents per bushel, the State tax was reduced to six cents, and in 1841, under the further decline of the duty, the protection was only 1.6 cent per bushel.

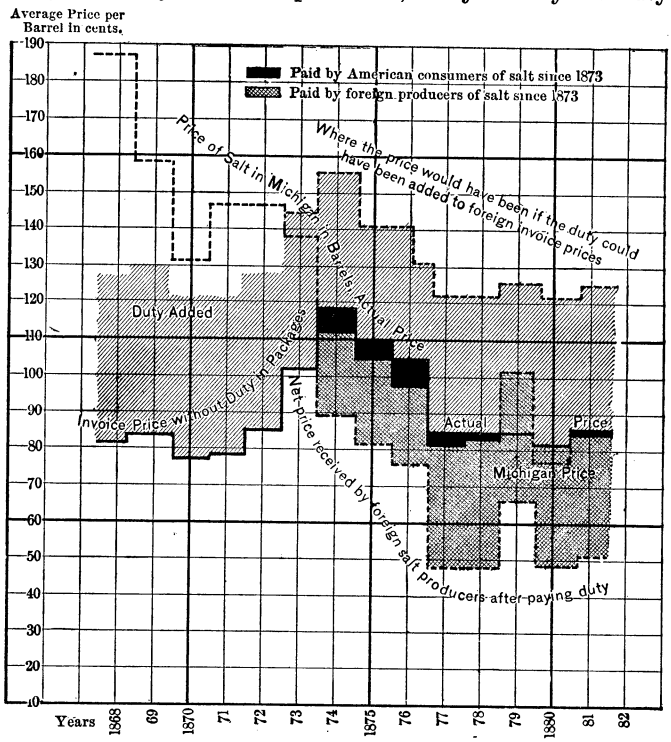
The highly protective tariff of 1842 laid a duty of eight cents per bushel, which in 1846 was reduced to twenty per cent., equal to 2.43 cents per bushel, and the state reduced its tax to one cent per bushel, where it still remains. Hence, for ten years ending in 1857, the protection to the New York salt-makers was only 1.43 cents per bushel, and under the reduction in 1857 the protection fell to three-fifths of a cent per bushel. In 1861–2 the duties were raised to from ten to thirteen cents per bushel. In 1872 these rates were reduced to from $4\frac{1}{2}$ to $6\frac{3}{4}$ cents per bushel.

Meanwhile the legislature of Michigan, in 1859, offered a bounty of ten cents per bushel, for all salt over the first 5,000 bushels produced from water obtained by boring wells in Michigan. Though the tariff protection was then only $1\frac{2}{3}$ cent per bushel, capital rushed into the manufacture at a rate that soon compelled the State to repeal the tax. The production, beginning in 1860 with 2,360 bushels, rose in 1881 to 13,751,495 bushels, which about equalled the entire consumption of foreign salt in either 1860 or 1880. The only special advantages enjoyed by Michigan over many of the other States lay in the temporary offer of the bounty, and the cheap supply of sawdust, fuel, and lumber for barrelling, furnished by the vast lumber manufacture in conjunction with which the salt manufacture is carried on.

In the competition thus set on foot between the Michigan salt producers and the importers of foreign salt, the Michigan salt has steadily declined from a price equal to the invoice price of the foreign salt, plus the duty, down to a price actually lower in some years than the invoice (foreign) price of the imported salt free of duty. The diagram shows the prices.

Here it is evident that the Michigan prices for the five years, 1877 to 1881 inclusive, are on a level with the foreign invoice prices without duty from 1868 to 1872, and are from twenty to twenty-four cents per barrel lower than the foreign invoice price from 1872 to 1876 inclusive. But the striking fact shown by this diagram is that the reduction of from four to six cents per bushel (sixteen to twenty-four cents per barrel), made in our import duty in 1872, sent the foreign invoice price of salt up by from

twenty to twenty-four cents per barrel, or by exactly the duty.*



If there were any class of cases in which Mr. Mill's theory would apply, that protective duties on imports would make themselves felt in the increased prices of exports, and would therefore, operate in part to tax foreigners on our exports, and in part to lessen our exports, such an effect might be expected in the case of the import duty on salt acting on our export of butter. Under the tariff of 1851, with a duty of only 1.5 cent per bushel on salt, the country exported less butter in five years, than when the duty in 1862 was made twenty-four cents per 100 pounds it exported in one year, viz., the year 1863. In fifteen years, from 1846 to 1862, of virtual free trade in salt, the

* David H. Mason, of Chicago, a most accurate economic expert, says ("Report of Tariff Commission," p. 1205):

"The reduced duty went into operation August 1, 1872. Let it be noticed that the foreign producers, who always take whatever profit circumstances will permit them to

country exported only 66,118,096 pounds of butter, while in the ten years following, under a duty of twenty-four cents per 100 pounds, the export of butter rose to 104,031,946 pounds, being more than twice as large an export of butter when the duty on salt was twelve-fold higher than under free trade.

If the import duty on salt is powerless to prevent the doubling the export of butter from whatever cause, it may safely be affirmed that the notion that duties on imports are a check on exports is the dream of a visionary.

238. Leather, Boots, and Shoes.—The United States surpasses every other country in the abundance per capita, average quality, and cheapness of its supplies of leather, boots, and shoes. Lynn began to export women's shoes in 1788. In 1795 she supplied the Southern markets, and sent some to Europe, and in 1874 the product of the Lynn factories alone was $14,000,000, and the three States of Massachusetts, Maine, and New Hampshire now make upwards of $100,000,000 worth per annum in factories, while the total factory product of the United States in 1880 was $166,050,354. The product of the petty individual shoemakers, and makers to order, admits of no accurate statement, and hence we are without any data of the aggregate quantity consumed.

The United States has three and a half times as many cattle per capita of population as Great Britain, about as many sheep;* and imports free of duty almost exactly the same annual supply of

---

get, *put up their prices immediately* after the passage of the bill, in June, 1872, reducing the duties on salt, the invoice price, even in July, 1872, under the old duty, being advanced over one and one-quarter cents per 100 pounds; in fiscal year 1873, very nearly six and one-half cents above what it was in fiscal year 1872; in fiscal year 1874, about ten cents; in fiscal year 1875, over seven cents; and in fiscal year 1876, over four and one-quarter cents. In forty-seven months after the reduction of the duty took effect, the average increase in the foreign invoice value amounted to 8 343 cents per 100 pounds, or to more than two-thirds of the duty taken off. Practically considered, therefore, the reduction of duty deprived the government during that period of $1,611,336.09 of revenue, and legislated $1,120,281.69 of that sum into the pockets of the foreign manufacturers of salt, to whom the legislation by Congress was an enabling act to that extent by the enlargement of competitive powers which it conferred upon our alien rivals. Comparing the whole period ending in 1881 with the one ending with July, 1872, it appears that the foreigners increased their invoice prices an average of 3.895 cents per 100 pounds, or by nearly one-fourth of the duty taken off, so that, in the aggregate, the government lost $3.891,113.88 of revenue from salt in packages alone, and the foreign salt-makers pocketed the sum of $1,232,990.91; consequently, the legislation in 1872, advocated and framed in the interests of cheap salt, was virtually a movement to enable the foreign manufacturers to charge more for their salt, at the expense of the national revenue, of the American consumer, and of our domestic producers."

* As many per capita, viz., 31,000,000.

hides, so that our aggregate sources of leather supply must be fully twice as abundant as those of Great Britain. The shipments of shoes from Boston alone, to points outside of New England, in 1873, were 55,000,000 pairs, for which the returns were $61,875,000, being $1.12 per pair, while the shipments from the whole of Great Britain to all parts of the world were in the same year only 6,332,328 pairs, of which the returns were $8,197,852.80, showing an average selling price of $1.28 per pair. This shows that the current producers' prices were lower in New England than in Great Britain, which is in accordance with the standing law that prices will always be lower where the largest supplies are produced.

England imported in 1875 109,906 dozen pairs of boots and shoes, and exported 462,104 dozen pairs, leaving a net export of 352,198 dozen pairs, or 4,226,376 pairs, which is about one-twentieth the trade in shoes which would figure as exports if New England were an independent nation.

The United States export boots and shoes to thirty-eight foreign countries, of which the British West Indies and Mexico are our largest customers, and exports sole, upper, and other leather to forty foreign countries, England buying 27,284,716 pounds, worth $5,529,600. We also ship morocco and other fine leather to thirty foreign countries. England receiving six-sevenths of our shipments. Side by side with these exports we also import nearly as large a quantity of leather for various purposes as we export, notwithstanding an import duty of 15 per cent. on leather and 30 per cent. on its manufactures.

A repeal of these protective duties would substitute foreign for American leathers and boots and shoes first in the Southern and Pacific States, and would cause a temporary panic in prices, notwithstanding the average prices in the United States, both on leather and most of its products, are lower than they are abroad.

In spite of these facts, the Wilmington (N. C.) *Morning Star* lately said :

"A pair of shoes that can be bought in England, and made of better material at that, for $2, will cost nearly double in the United States. Every time a father shoes his wife and children he is paying a tax to New England manufacturers of from 50 to 100 per cent."

North Carolina has but five shoe factories, which turn out a product of only $107,000 per year. Her people have all the natural facilities, and have had all the time in which to acquire the artificial facilities, that those of New Engiand have had. Within the experience of persons now living, it was the common

custom of persons residing in the mountain sections of North Carolina and East Tennessee, to carry shoes to church on Sunday in their hands to the church door, put them on merely to wear while inside the church, and on their exit remove them again at the church door and walk barefoot the rest of the week. It is lack of enterprise which induces a people to oppose the introduction of the manufacture of shoes into a country, upon whose hills millions of cattle might freely grow the hides, lest some one else will make a profit out of their manufacture, which they might make if they would, but are too lazy and thriftless to make. It is unpatriotic spleen to complain of the priority in enterprise of those who will make shoes, as being a mode of oppression and rapine practiced upon those who will almost forego their use rather than make them. This compound of unthrift and spleen are the natural soil in which, at least in America, the seeds of "free trade" germinate with fecundity and grow with power.

A man who practices thrift himself, in his personal affairs, will readily submit to the tax, if tax it require, which is necessary to give him thrifty social surroundings of every kind, and especially a thrifty school, a thrifty town, county, state, and nation. But thriftlessness shirks production, and holds aloof from every form of enterprise and labor, until its means of subsistence are lowered to a standard bordering on barbarism, and its forms of obtaining the services of others verge toward either swindling, vice, or slavery. It then finds it much easier to see why it should contribute nothing to the welfare of others, since it has fallen into the ways and habits which contribute nothing to its own welfare.

Hence it is that in the United States the thriftless "ne'er-do-well" class, and the class who really believe that to love one's country is a pretence which stamps a man as presumptively insincere, form the basis of impulse and type of charcter which avows the free-trade passion.

Protection to native industry strikes down into the depths of the human heart through two leading sentiments or tap-roots, one of which is the perception that it is in an economic sense profitable to the aggregated mass of the people, but the other of which must always be that public spirit which feels that the most active employment and highest utilization of man is, necessarily and without computation, profitable. If free trade gives us our choice of three arts, protection gives us a like choice of thirty. When public spirit wanes, protection goes to the wall, but not be-

cause it is not economically profitable to the citizen who opposes it as well as to all others. Its opposition comes from those whose passion it is to sacrifice ultimate welfare to temporary. Hence a sufficient ground-swell of misrepresentation can now and then be manufactured to secure a transfer of power from the provident and enlightened to the thriftless and unwary.

Society has its periods when it grows tired of being wise, tired of being just, intelligent and humane, and prefers to be erratic, spasmodic, and foolish. When these freaks come, it delights in having a grand All-Fools' Day. It honors folly as something generous and democratic. It abuses prudence as the virtue of the parsimonious, and actually succeeds in making inertia appear profound and vacancy and stupidity inspired. When the carnival is over and society resumes its judgment, there will always be those who will contend that things are better for the relaxation. They will call the pressure of their own noses against the revolving grindstone a getting down to hard-pan, or, perhaps, a destruction of monopolists. It is due to this relapse toward a rest from being wise, rather than to any weight or dignity that has attached to free-trade arguments, that the American Congress or politicians have, at periodical intervals, solemnly enacted that the prosperity which had been enjoyed in protective periods should be razeed, and that we should all, like Nebuchadnezzar, eat grass for a while. So long as this passion, of the shiftless and unthrifty man for change, is a predominant element in his basic nature, there is at no time any assurance that a partially free-trade policy may not be adopted temporarily, at any moment, in a period of prolonged peace and prosperity.

239. Industries Must be Unprofitable, as well as Desirable, to Merit State Action.—The political principle underlying protection to any industry which is temporarily unprofitable, but permanently desirable, applies with expanding and increasing force as the prospect that the industry will ever be profitable diminishes, provided the conviction that it is desirable and essential to the general welfare, irrespective of the profitableness to those who carry it on, is sure and general. It is on this ground that the state, in different countries, becomes the active promoter of education, religion, charity, amusements, internal improvements such as roads, lights, sewers, docks, wharves, paved streets, public libraries, parks, public games, the destruction of dangerous or offensive animals, quarantine regulations, lighthouses, the care and removal of dead animals, garbage and filth,

vaccination, the planting of trees, and scores of other details. Each of these represents an industry in the carrying on of which there would be some slight return, apart from any aid thereto by the state, but the return would be insufficient to secure its activity in the degree required for the general good. Teachers can always find a few pupils if they teach for fees paid by parents. Until the present century, and outside of the United States and Germany, these were almost the only schools. But owing to the unprofitableness of the industry when left thus unaided, certain states deem it better to make the education of youth a function of the state. So it is an unprofitable industry to detect and punish crime, in the sense that the private fees obtainable for the work would never secure its adequate performance. It is because the work of administering justice to criminals is both necessary to the common weal, and yet productive of no profitable return in the economic sense, that the state deems it necessary to make the administration of justice one of its functions. In some states and nations the administration of religion is a state function, in others it is sustained by individual gifts and fees. But in all except a few very large church congregations sustained by preachers of special eloquence, it is, in the economic sense, an unprofitable industry, requiring to be sustained by either voluntary or involuntary taxation.

In this point of view, the state may be economically defined as being the aggregate of all the perpetually unprofitable industries which, for public and prudential reasons, it is expedient that society should be taxed to protect. If the adjustment or trial of private disputes and the punishment of crime could in any manner be made so intrinsically profitable as a business, without state aid, as to be efficiently carried on by private persons for profit, court-houses and jails, built at public cost, would soon cease to exist, and judges and courts, maintained at public expense, would disappear. The usual unprofitableness of the business is as essential as its intrinsic desirableness to the governing majorities or deciding classes of persons in the state, to insure the making it a state function. Hence, industries, however desirable, which are also usually profitable, are never, where profitable, made a state function, unless it be that they are less profitable than the state feels they should be. The particular industries which a state will aid, or exalt into a state function are as varied as the genius, or whims, of unlike races. In one it may be predicting the weather ; in another, watching eclipses.

CLOSING WORDS.

240. Private and Public Purposes.—The habit of regarding certain objects or functions of the state as public, and others as relating only to private, interest is so strong in many minds, that they suppose it to be innate and self-evident that to tax a citizen to maintain a court-house is to tax him for a public purpose, but to tax him to maintain a factory is to tax him for a private purpose. Very likely such will say that in one case the money goes to the state, in the other it is paid over to a private individual.

The money raised by the state to build court-houses, maintain judges and sheriffs, and sustain the ordinary administration of justice, is paid in salaries to the judges and sheriffs, to be expended by them in the support of their families and the gratification of their individual wants. It is earned by them in the performance of their official duties, but it is paid to them as individuals, simply because the functions they perform are not self-supporting—in short, are unprofitable industries in the economic sense (but are held to be socially desirable), and are therefore paid for. Hence, when the state takes money from the tax-payer A to pay to the judge, sheriff, or school-teacher B, it is taxing A to sustain B in an industry economically unprofitable, but socially desirable. What is a public purpose and what a private purpose varies with the social evolution of a state or tribe. In all the Catholic countries of Europe, wherein state and church are united, religion is a public purpose, and the education of youth a private purpose. In the United States education is a public purpose, and religion is chiefly a private purpose. A few centuries ago the right to punish murder was a private right, which belonged first to the deceased's relatives. Only when they waived their private right did the punishment of murder become a public purpose. In China the planting of trees, and protection of the people from river floods, is a public and imperial purpose. In the United States it is a private purpose. In Greece the Olympian, Isthmian, and Nemean games were a public purpose of the highest state importance. In America all amusements are a private purpose. In the middle ages the relief of the poor was a private purpose, except so far as the church was part of the state. In America poor relief is a public purpose in some states, and a private one in others, but is nowhere a function of the central government.

It is conceivable that, in the infancy of society, hunting and fishing, and even the cultivation of the soil, if carried on by the commune or tribe, would be a public purpose. Certainly, in many of the more savage African tribes visited by Stanley in his first voyage down the Congo, and wherein no trade could be done except with the chief as representative of the tribe, trading and receiving presents were public purposes. But in civilized states both receiving presents and trading have ceased to be public purposes.

What is a public purpose and what a private varies, therefore, more or less, as between any two states and stages of development. But in all, the public purpose is that which the majority of numbers, wealth and force in society, decide shall be done by the state, and the private purpose covers all matters of choice, in which the individual is left untrammeled by the state. In a military age, when fighting was the chief occupation of the ruling classes, all taxation to maintain soldiers was a public purpose. But taxation to maintain a teacher would have been deemed very clearly for a private purpose. It is possible that as we advance industrially the military function may come to be performed wholly for hire, as the educational one comes to be absorbed by the state. Certainly, with each step in a nation's advance from the military toward the industrial state, it gives less attention to its armies and more to its industries.

241. Post Hoc, Ergo Propter Hoc.—The class of economists who prefer the crude simplicities of dogmatic assumption to the often complex methods of historic proof are wont to meet all economic argument, based on a grouping together of economic causes and their consequences, by the apt phrase, "*Post hoc, ergo propter hoc.*" The use of this phrase by free traders as a means of thwarting an argument for protection, founded on a coupling of protective policies with national prosperity, is constant, and seems to be regarded as efficient. In fact, as effects cannot well precede their causes, all argument from causes to effect, and, indeed, all logic and philosophy, are open to be met by this phrase with equal effect. At a given period after the moon is either in the zenith or the nadir of a given point on the earth's surface, the tides rise in the ocean at that point. Can the moon's influence over the tides be negatived by the simple sneer, "*Post hoc, ergo propter hoc*"? So of all other causes in science. The *propter* follows the *post.* An accurate statement of the nature of the historic method would be that "one adequate or conducing

cause having arisen immediately prior to the event, and no other adequate or conducing cause being shown, the event will be inferred to be due to the adequate or conducing causes actually shown to have preceded it, in preference to any assumptions of causes which are not shown to have existed, or which, if they existed, were not adequate, or, if existing and adequate, did not in fact conduce to the event, owing to the interception of their operation by other known events."

In the presence of adequate producing causes, no others being shown, the maxim, "*Post hoc, ergo propter hoc*," becomes the very form and substance of logic instead of a fallacy. Hence, in economic argument, the maxim does not of itself disclose or imply a fallacy in the argument, but presents only a buttress behind which the opposing advocate may plant himself while he presents the other adequate and conducing causes to whose operation he himself attributes the event. As a cover for such opposing statements it is valid. As an independent and self-sustaining objection, or as a substitute for the very proof it may properly introduce, it is entirely void.

The reader should also be admonished against the sophistry of assuming that simplicity and even beauty in the statement of a policy are to be mistaken for simplicity and beauty in its operation. A policy which may be extremely simple in its statement may be infinitely complex and painful in its operation. On the contrary, a policy which may be as full of entanglements in its statements, as a fort is of buttresses and ramparts, may be as delightfully direct and simple in its operation, as that fort is on an invading foe. Herod's decree, "Kill all the babes under two years of age"; Solomon's decree, "Divide the babe equally between the two women who claim to be its mother"; the Russian Czar's decree, "Build the railway from St. Petersburg to Moscow in the straight line between those cities as I now draw my pencil"; and the Compromise Tariff decree of 1833 in the United States, "Reduce the tariff 10 per cent. each alternate year until it stands at 20 per cent. all round," were models of simplicity in their statement, but of complicated barbarity and multifarious torture in their operation.

But time would not avail to caution the student against the multifarious forms which fallacy may assume. Fallacy, like fraud, defies accurate definition in advance by wearing a new coat every time it appears. Hence it is that economic works, however ample, truthful, and explicit may be their contents—

and very few of them are either ample, truthful, or explicit—can never brace the student certainly and finally against error. They are useful in cultivating the habit of detecting error, but in their use there must arise the new men who are wiser than the old books, and who are as the new wine that can not be held in the old bottles. Such men will see in each exigency, as it shall arise, the facts which distinguish it from all preceding cases, and will detect in advance that right way which books can only point out after it has been trod. These pioneers in industry and in legislation are the actual economists, who stand in a like relation to the science, as the great lawyers do to the law. They absorb its past learning, but they mold its future quality. So, after economists have written, and all that books can teach has been said, it remains that political economy, or the science of man in society, is a part of the process of the continual radiation of new truth by new minds. It comes by perpetually renewed inspiration. As held by the best instructed minds, it will not be identical with the instruction they received. Its latest life will always have found its suggestion, but never its exact form, in books. It cannot cease to be a process of emanation or of evolution. To this extent, as Dr. Henry C. Carey was wont to say, political economists can make books, but books can never make political economists. It must be in the man. So must all art, power, inspiration, and success. But not in one man absolutely. All men know more than one man. The highest school of economic thought must always be the aggregated consensus of opinion of the world's best business men, producers, workers, whom, as forces, the statesmen and instructed thinkers marshall and generalize. The writer has tried to bring this book abreast of the moving host, to tune it to the living pulses of the active world. If he has succeeded, he has caught the impress of the marching host, their flying banners, and their fervid cause, for a moment. That moment past, the economists of the future in their march sweep by, and again raise life above the book. These real economists include those who conduct the world's industries and legislation, rather than those who instruct in this particular art. The claim to be endowed with the gift of prophecy as to future economic developments, often springs from being out of sorts with existing economic conditions. Those who adapt themselves, with most facility and tact, to the demands of their environment, can usually see as far, or farther, ahead than the unsuccessful. Economic philosophy is yet in its nascent and

plastic state. It is born, but it is only beginning to grow. The science will proceed according to its inward law, and will have its own mode of growth. It will be a factor in the world's progress as momentous as could be wished. But it must bide its time. Its period of ascendency over mankind will not be that of its first youthful impulse, but of its sober second thought. At present the honest study of society, in its economic aspects, will tend to impart to its students a tone which may be defined thus : In observation, industry; in generalization, modesty; in criticism, equity; in nationalism, harmony; in internationalism, purity; in cosmopolitanism, sincerity. By these signs ye shall know the true economists.

THE END.

GENERAL INDEX.

A.

Absentee expenditure, 465, 466, 487

Abstinence, relation of to wealth, 74, 210, 217, 307

Abundance and scarcity, Bastiat's sophism on, 508; protection to home industry makes more abundance than free trade, unless the article is one of which we can permanently import our whole supply, 510; effect of abundance of cotton on values, 687

Account, money of, 335, 348, 349

Accumulation, its social utility, 220, 222, 304–307; involves assorting men according to their productive capacity, 309; large fortunes the measure of a high social demand for some special change of business energy from outworn channels, 397

Acreage, statistics of acreage planted, when first kept in England, 119; of large proprietors in America and Europe, 269, 270; in England, 272–275; of forests, 148; of great land grants, 157–159; of bonanza farms, 269; of cultivation in Ireland, 274; of cultivation in India, 486; of land in India, 488; of cultivated lands in England and Wales, 545, 546; in China, 547; decline of acreage to wheat, etc., on repeal of protective duties, 559

Adage, ridiculing facts, 24

Adulteration of highly-taxed wines, 475

Ad valorem duties, tariff of 1828, 383; defined, 481; few in German tariff, 517

Advice from John Bright on the American tariff, 608

Adzes, American, superseding English in 1868, 596

Africa, population of, descent in America, 33; markets in, 99; manufacture of iron in Central, 644

Age, relation of to crime, 443; prehistoric ages, iron and steel in, 645

Agrarian laws, 138

Agriculture, wages in go far toward fixing wages in manufactures, 181; rate of profit in, 177, 178, 192; product of, in various countries, 230; how affected by situation and fertility, 238–255; number engaged in, in United States, 320; may employ too many, 382; functions of the state concerning, 433, 434; decline of modes of tillage in Ireland through loss of home market, 491; potato rot in Ireland caused by decline, 491; agricultural class large in France, 496; government aid to growth of beet sugar, 504; improvement of, in Prussia, 520; women, number of working at, in Germany, 525; in Würtemberg, 525; communal system of, in Russia, 526; renovation of, in China, how to be effected, 551–555; decline of acreage planted to wheat in Great Britain on withdrawal of protective duties, 559; the small proportion of agricultural products which will bear export

makes home trade essential to abundant agricultural production, 602
Agricultural colleges, bountied in United States, 145
Agricultural implements, duty on, and export of, 610
Alcoholic beverages, taxes on, 475; English protection to manufacture of, 482; against Irish, under act of Union, 493; in France (wines), 497; revenue from, in France, 498; retaliatory duties on, by England, 500; in Russia, 527; duties on, removed in Japan, 553; English acts to protect manufacture of, 555; value of, consumed in United States, 25; wages in manufacture of, as high in England as in United States, because as well protected—as high, 582; as well protected, 482; in United States beer, ale, and porter protected and exported, 610
Ale, duties on imported, export of, 610; revenue from, 613
Algeria, 499
Aliens, exempt from all taxation in Turkey, 488, 489
Alloy in American dollar, 337; in English coins, 339–342
Alpaca, wool and fabric, 672
Altruism and altruistic labors, only useful in the very few, 323; altruistic effects obtained by egoistic means, 433; alleged lack of, except in the family, among Chinese, 552
Ambition, its function in statesmanship and industry, 400, 623–626
America, Central, United States buys from more than we sell to, 600
American school of Political Economy, 16, 36; influence of American war on political economy, 17; Saratoga convention of, 17; influence of American teachings in forming the Zollverein, 514
American banks, crisis of, in 1857, 377
American colonies protected wool and wool manufacture variously, 676
American Indians, ownership by, 23, 49–54; lived in stone age, 645; agriculture, value of product, 230; tribal government among, reflected their economic condition, 402
American inventions, plows, 264; reapers, 265; general, 596; glass, 643
American manufactures, in war of 1812–1815, 641, 642; colonial, declared a nuisance by parliament and punished, 647, 648; wool and woolen manufacture protected in the colonies, 676
American opinion needed, 382
American markets for Canadian lumber fix its price, 532
American people, drink bill of, 25; meat, bread and groceries, bill of, 25; safety of travel, 28; area of America, 141; official governing class in, 423; methods of in politics disappoint in some things, 424–425; insignificance of the accidents that prevail, 425; not alive to moral issues if the wrong doing is pervasive, 426; cost, war of, 1861–5, 438; crime among, 442; duties of, in protecting American labor against excessive immigration by preventing the disruption of Chinese home industries, 548; demand for silks, 633; lost their mercantile marine in 1855 by previous blunder in trying to get cheap iron and steel through low duties, 648–650
American ocean steamer lines lost, how? 657–660
American trade, how carried, 656, 659
American Union, closely identified with the protective policy, 649, 628, 629
American vessels, reasons why must be American-built, 661, 662
American workers, an immigrant differs from an imported product in economic effect, 321; American workers inventive because well paid, and *vice versa*, 596, 597
Amusements, state in respect to, 431

Anarchy—anarchists of Chicago, 91; relation of, to the state, 131; the organization of labor in industry is governed by the value sense on both sides and is largely beyond the pale of law, 309; in that sense anarchic, 310; anarchy not organization, 310
Angel and angelet, 340–360
Angora, wool, 672
Animals, rudiments of government seen among, 378; absence of working animals in China and economic effects of, 540–545
Anna—India, 338
Annapolis, first colonial congress at, protected wool and wool manufacture, 676
Appropriation, all title and production begins in, 125, 130
Aqueducts for cities, 430
Arbitration, 303; derives its efficacy from previous belligerency, 435; in effecting emancipation in Russia, 526
Area of United States compared with Europe, 141; of countries, 230; of German Zollverein, 515
Argentine Republic, unit of coinage of, 338; American purchases from, paid by England's sales to, 600; England's trade in cotton goods with, 689
Aristocracy, and land-holding, 270; defined, 405; relation of, to numbers, 405; *quasi* aristocratic views of Calhoun, Webster and Hamilton, 413; aristocracy of manipulators of conventions, 425; and protective policy in England, 557
Arms, 382
Army, health of British and French, 31; employed to extend foreign trade, 67; part of nation's wealth which is not private wealth, 66, 68; American policy of having no army, 68, 437; destruction of values by allied armies in France, 70; destruction *vs.* consumption of values by, in United States, 70; founds all governments, 435; including that of United States, 438; an army is a factory and what it makes, 439; cost of, in England, 479; in India, how paid and officered, 485, 486; of China is also the police, 537; organization and mode of drilling and fighting depend on condition of iron and steel manufacture, 646; officers of, in England, 406; Roman army furnished according to capital, 412; when army is chief power in the state the form of government indicates it, 413; army part of the executive, 416, 427; cost and economy of, 437, 440; sustained in France and United States by conscription, 437; expenditure, 438; native and English officers of, in India, 486
Art, is political economy an, 1–9; Adam Smith and Stewart so hold, 7; export of works of, 610; import and revenue from, 613; position of glass-making in useful arts, 638, 644
Artisans of a whole country can not learn new trades, 66, 67; wages of American higher than English, and their work better, 596; Birmingham Board of Trade and London *Times* on, 596; Spanish and Dutch, how attracted to France, 673, 674
Artel, in Russia, 526–530
Ash, pot and pearl, export of, and duties on import, 610
Asia, tribute paid by, 454; brown race prehistoric, 645
Associations, wool growers and wool manufacturers, combine to form American tariff on wool and woolens, 677
Assumption, substitution of for argument, 25, 26; simpler than investigation, 571
Athens, its government the product of economic life, 402; aristocratic, 405; dependence for food, 570
Attraction in the state, 433, 664; may be greatest toward a country of high taxation, 473
Augers, English and American, prices, 590; qualities, 596
Australia, registration of titles in, 143; life of herdsmen and shep-

herds in, 317; effect of Australian and California gold on coinage, 385, 386; governments of, 407; colonization of criminals in, 445; tariffs in, 530, 531; export of wool from, since 1810, 676; crime in, 33, 442; prices of Australian wool abroad and of Ohio wool in Boston (chart), 679–681; England's trade in cotton goods with, 689
Australia, West, fixed terms of office, 407
Austria, coinage unit, 338; alleged bankruptcy of, 448; war with Germany in 1866, 516, 522
Austro-Hungary, government of, 407; expenditure on army in, 438; protection tariff essentially like those of France, Germany, etc., 530; product of iron, steel, and coal, 650; the basis of unity, 630; wool supply, 673
Autocracy, in form of government not inconsistent with democratic methods, 526; or socialistic, 528–529
Avarice, its function, sphere and cost, 201–210, 433; relation of to wages, 625
Axes, English and American, prices, 590; qualities, 596

B.

Babylon, woolens, 669
Bacon, revenue on paid by foreign producers, 586; exports and imports, 610, 613; revenue from, 613
Baconian school, 24; doctrine of protection, 670, 671
Baden, 515, 523
Balance of Trade, Gregory King's essay on, 95; example of, 383; turned in favor of United States by protection in 1824–1834, 384; Doctrine of, stated, 393; Bacon on, 392–394; examples of in United States from 1862–1883, 393–395, 599–602; doctrine true when statistical omissions are corrected, 395; discussed by Adam Smith, 500; where no imports are needed, effect of, 599
Balance of industries, A. Jackson on, 382
Bank of England, organization and practice of, 389; profits, 390
Bankers, protected when home trade is secured against foreign, 609
Banks, Secretary Chase and banks of New York, 221; distrust of, by the poor causes hoarding, 224; antiquity of, in China, 334; deposits and checks, 349; notes of, 350; national, 351; secured, 351; state and private, 352; part of banks in crises, 371–373; limitations on Bank of England, 374; stopped in 1857, 377; practice of Bank of England in a panic, 378, 389; banks may be led into inflation by excess of goods, 384; may by discounts produce inflation, 389; may profit by crisis, 389; policy of standing by each other, 389; debts of, in United States, 448; part of banks in aiding government in Russia in its issues of paper money, 528, 529; relation of woolen industries to, 669
Banks for savings, deposits in, in United States, 190
Bankruptcy, effects of by government, 221; in United States in 1854–7 produces crisis in England, 376–378; alleged, of Russia, 529; individual, avoided by national liquidation of debt at current values, 529
Bark, tanning, protection on and export of, 610
Barter, doctrine of, applied to domestic wages, 321–323; international trade is not, 601; if it were it would be oppressive in refusing most of our products, 602
Bavaria, 515, 522, 523
Beef, duties on, 382; paid by foreign producers as to United States, 586, 610, 613
Beer, protection and export of, 610
Belgium, trade with France, 26; wool, 26; silks, coals, wool, hops,

glass, 2; travel in, 28; unit of coinage, 338; government of, 407; proportion of improved land and tillage, 540; rates of wages in, 581, 511; our balance of trade against, 599–602; product of iron, steel and coal in 1883, 650
Bells and bronze, duty on and export of, 610
Beneficence, of the adjustment of each part of society to every other through interest, 400, 401; of the economic law that prices rise when production is small, 690
Bengal, petition of cotton and silk manufacturers of, for protection against English competition, 487
Berlin, 405, 514; Berlin and Milan decrees, 640
Billiard tables, export of, 610
Bimetallism, 361–369
Birmingham, American cheapness in iron and steel wares affects it, 596
Blacksmith's tools, 383; wages in various countries, 511
Blacking, export of, 610
Blankets, protected, 383; wool for, 672; consumers of, 589; not taxed, 590; shoddy in, 590; prices of, in England and America, 590
Bolivar, monetary unit of Venezuela, 338
Bolivia, monetary unit of, 338
Boliviano, 336
Boards, local diversity of in England 478; Boards of trade on destruction of silk industry in England, 636, 637; on Canadian manufactures, 665
Bonanza farming, 262–272
Bonds, national, bearing interest, relation of to notes, 392
Bonnets, protected, 383; exports, 610; imports and revenue, 613
Books, duties, 383; imports and exports, duties on, revenue from, 610, 613
Boots and shoes, recent strikes in, 328; heavily protected from 1816–1828, 383; wages in Massachusetts and England, 583; production and prices in America and Great Britain, 697, 698
Borough boards and rates, 477–479
Boston, glass, 644
Bounties, in land, 144; on export of beet sugar essentially a fiction, 506; the substitution of bounties for duties is generally a free trade notion, 597; objections to, 596; on silk culture, 632; on ships by British government, 659; on sheep culture—killing wolves, 676; on salt production in Michigan, 695
Bourgeoisie in France, 403
Brandy, English, 482; German, 520
Brass, 383; in coinage, 339; success of American, 596; imports of and revenue from, 613; exports of, and duty on imports, 610
Brazil, coinage of, 338; British control of trade of, 516, 670; tariff, 530; protection of metals in chart, 366; balance of American trade with, 600; benefited by removal of American duties on coffee, 600; England's trade with, 689
Breach of trust, as a mode of conquest, 484
Breeding of sheep to any pattern, 671; in France, 674
Bread and breadstuffs, cost of, 25; relation of, to laboring class, 26; dealing in breadstuffs and provisions on boards of trade or produce exchanges, 105–120; effect of rise in price during scarcity to cause economy in use of, 106–120; capacity of a few to produce, 220; black bread in India, 227; home market for, 382; export of breadstuffs from France prohibited by Colbert in interest of manufacturer, 60; German trade, in, 519; effect of duties on trade between Canada and United States, 533; bread not reduced in price by repeal of corn laws, 558; revenue on imports, of into United States paid by foreign producers, 586; exports of, 610; imports and revnue from, 613; consumer pays no revenue on, 615
Breech-loaders, American manufacture for export, 596

Bremen, 523; steamer line to (American), how destroyed, 657
Brewers, incidental protection to, in England, 482
Bribery, agency in procuring the Act of Union, 493
Brick, strikes and losses in, 328; England gives Ireland free brick but protects herself against Irish brick, 493; revenue collected from Canadians on, 586; exports of, 610; wages of making in Massachusetts and England, 582; imports of, and revenues from, 614
British Empire (see Great Britain)
British Indies, balance of trade of, against United States, 600
British advice, through free trade leagues, 604; from John Bright, 608
British drumbeat, who pays the drummer, 686; extent of British trade in cotton goods with coerced countries compared with her free trade, 689
Bridges, Roman, taxes on, 454
British cholera, 488
Broad, coin of Cromwell, 340
Broadcloths, wool for, 672
Bronze, 339; duties on, and exports of, 610; age of, 645
Brooms, exports of, 610; imports of, and revenue from, 613
Buckets, export of, from United States, 596
Budget, annual, 453; of United States in 1883, 468; of 1882 and 1878 in Great Britain, 479; of 1878 in France, 498
Buenos Ayres tariff, 530
Building trade, wages of, in United States and Great Britain, 582; strikes and losses in, 310, 328
Bulgaria, roses in, 215
Bullion, relation of, to money, 335
Bureaucracy, 406
Burlingame Mission, 535, 550
Butter, under tariff of 1816 to 1828, 383; duty on does not affect price, 586; amount of revenue collected by United States from Canadians on, 586, 591; export of, 610; import and revenue from, 613; export of butter and duties on salt, 696
Buying, necessity of, in order to sell, a specious economic error, 599, 602

C.

Cabinet, construction of, 410
Calicut, trade of, 486
Calicoes, importation into England prohibited, 489; in 1720 fined persons found wearing, 489, 670; Napoleon on, 678
California gold, 385
Cambrics, France prohibited, 500
Cambridge, Massachusetts, glass manufacture, 641
Camel, iron and steel brought by, from China 2000 B.C., 645
Canada (British possessions in North America), coinage of, 386; national policy of internal improvements and protection in, 531–533; Canadian liberty largely enhanced by her juxtaposition to the United States, 531; American duties on Canadian products largely paid by Canadians, 532–533, 591–594; relative taxes in Canada and Vermont, 576; free trade can only exist in connection with national and political unity, 574, 576; Canada reaps only where she has sown, 575, 576; Canada pays through the American tariff for her political sovereignty, how much? 598, 599; same, 615, 618; conditions of lumber trade between Canada and the United States, 616; progress of manufactures in, under "national policy," 664–668; her growth in woolen and cotton manufacture compared with the northwestern States, 665; report of Dominion board of trade on, 665; England's trade in cotton goods with, 689
Canals, effect of, 150, 152, 154; Chinese living on, 545
Cast-steel, English and American prices of, 590
Canvas, 652
Candles, England gives Ireland

free candles, but sews by a protected candle, 493; exports of, 610; imports of and revenue, 613
Caps, export, 610; imports and revenue, 613
Carpenter's tools, 596
Carpets, protected, 383; when introduced in France, 639; carpet wools not produced in United States, 675; duty on carpet wools is therefore a revenue duty, 678
Capital, its relation to credit, 6; when scarcity in production is capital according to Tooke, 116; wages are capital, 134; parts with labor when, 163; division of product between capital and labor, 163–166; capital employs only for profit, 169; sharing of returns of industry between capital and labor, 172–181; in Great Britain, 176; capital replaces wealth consumed in production, 180; economy of, in organizing industry, 188, 195; rates of profit depends on turning frequently, 192; in particular enterprises declines in rates of profit, but not in general industry, 195; defined, 196, 197; fixed or circulating, 198; rules labor by distribution to want, 201; subdivision of, destroys, 203; accumulation of wealth is humane, 203; is not the antithesis of labor, 211; is the opposite of a hoard, because always in social use, 211; effects of large capitals on industry, 219; how massed to control capital, 220; small capitals earn large rates of profit, 222; and *vice versa*, 223; all reproductive capital in constant social use, 224; large capitals promote wages, 227; basis of theory of diminishing returns, 228; balanced by theory of new fields, 229; wages are capital, 234, 235; capital the guaranty of wages, 235; why land is deemed an investment of capital in United States and not in England, 241; Views of Hamilton, Bastiat, Roscher, as to capital invested in land being an element in rent, 241; large capitals in farming, 262–267; economy of tenant farming, 268–272; economy of large holdings of land, 268–273; capital divides as a partner with the labor it employs, 309–314; but in a mode governed by conditions, 312; will the tendency of capital to share profits increase? 314; exhaustion of capital a cause of crises, 378; Price on crises, 379; capital as a power among democracies, 402; how represented in Roman elections, 412; Calhoun on representation of capital, 412–415; not well represented in British House of Lords, 426; inducement to loan to government, 448; relative equality of taxes on capital and on incomes, consumption, etc., 456; Ricardo on, 457; Mill on, 463, 464; plural voting, 479; spoliation of capitalists in India leads to cessation of industries and great famines, 485–488, 625; loans of, by Germany, 520; gains to both profits and wages by capital in form of machinery and animals, 540–543; increased employment for, under protection, not met by free traders, 560; capital and wages may both get higher pay in one country than another, 579, 582; Perry's error refuted, 579–582; the taxing power is itself a form of capital and as such may like all capital promote production, 585; reasons requiring a 42 per cent. tariff to ensure occupations involving equal "effort" with those conducted by foreign capital, 585; great capitals seeking profit are the best guaranty of high wages, 625; difficulty of arriving at capital accurately in census, 643; capital invested in imported American ships would always be foreign capital, 661, 662; capital invested in manufactures in

Canada, 665, 666; capital converted by steam inventions into the cheapest of all laborers, 681
Carolina, North and South, silk raising in, 631
Carpets, wages in, in United States and England, 582
Carriage, wages in manufacture of, in Massachusetts and Great Britain, 582
Carrying trade, between England and United States, brought down to free competition in 1816, captured by England (656) through protection to her iron and steel manufactures, (648) subsidies (659) reciprocity (655), piracy (663), and other phases of "righteousness," 608
Catallactics, as a synonym for political economy, 7
Cattle used as money, 333
Caucus, for nominating candidates, 417
Carrying trade, decline of, 656; causes, 640–664; extent of, 659
Carriages, exports of, 610; imports of and revenue from, 613
Cars, railroad, exports of, 610
Carthage, 453; tribute of to Rome, 454
Carts, exports of, 610
Cash, when credits turn into cash, money being cheap, 221
Cashmere wool, 672
Causes of transfer of any protected industries to protective countries, 681; made very plain where two competing countries having the same race and natural facilities protect opposite classes of industries, 681; and these two classes migrate in opposite directions, but always toward protection and from free trade, 682; of failure of Confederate States, 688, 694
Census, exceptions from, 25; can not take note of losses, 71; its value in economics, 38; population of United States by, 146; earnings of British people by, 176; failures of enumeration in, 224; Roman census a means of connecting wealth with voting power, 412; of 1880 in United States and 1872 in France, 486; no official census by Chinese government, 537, 538; alleged censuses of China fictitious, 538; their contradictions and absurdities analyzed, 539–543; census figures of United States are vague as to capital invested, 643
Centralization, varies in republics, 416; in France, 497; Germany, 514–525; in Canada, 531
Ceylon pearl divers, 414; Ceylon, England's trade in cotton goods with, 689
Character, an element in economic success, 307; qualities which give political leadership determined by economic conditions, 402
Charity, relation of, to industry, 199–210; is evoked by social demand, 204; relation of, to luxury, 213–215; to co-operative schemes, 314; to utility of social services, 325; altruistic effects obtained by egoistic means, 433; social effects of pursuing charity to the prejudice of industry, 446; soup-kitchens and other relief during cotton famine in England, 690
Charts, of prices of wheat in England, United States, and France from 1780 to 1880, 124; of immigration into United States, 147; of relative values of gold and silver produced in two successive periods, 365; of production of precious metals, 366; of prices from 1790 to 1875, 380–1; of prices and expansion in crises of 1837 and 1857, 387 of growth of debt, 447; of revenues and expenditures of United States from 1790 to date, 469; of miles of railroad built; iron and steel rails made; total rails made; rails imported; consumed; pig-iron made; rolled iron made; prices of pig and rolled iron and steel rails; pig-iron produced in Great Britain, and immigration for 23 years to 1883, 651; prices of wool in Europe and United States, and

"who pays duties on wool," 681; of average price of cotton per pound from 1790 to 1844, 687
Cheapness, distinction between, in temporary supply and in permanent sources of supply, 117, 508; large capitals promote, 206; in railway freights, 220; of money, turns credits into cash, 221; depends on dimensions in production, 219; relative, of gold and silver, 341, 342; of a metal promotes its circulation if free coinage is given, 341, 342; causes no increase of consumption where motive is display, 475; of beet sugar, 505; opposition of English refiners to, 505; J. S. Mill holds that if other nations could carry for England cheaper than English vessels, this would be a deficiency needing remedy by protective laws, 557; not secured by repeal of corn laws, 558; cheapest to buy may be dearest in use, 567; ultimate cheapness only attainable through present dearness, 569; cheap goods and machine labor, 584; of American iron and steel wares in 1868 relatively to foreign, notwithstanding bar and pig-iron were dearer, 596; *London Times* on How is that? 596; where cheapness depends on having the entire home market, protection secures, 609; effort of American free traders to get cheapness by low duties caused the war of 1860–65 for secession, 648–650; transient compared with permanent cheapness, 675
Cheese, revenue paid by foreign Canadian producers on, 586; export of, 610; import and revenue from, 613
Chisels, English and American prices of, 590
Cholera, economic causes, the origin of, 485
Chicago, Board of Trade, mode of doing business on and economy of, 102–120; anarchists of, 91; city government of, 405
Chicory, excise on, 481
Children, provision for support of, by state, 477; labor in factories in Russia, 527; relative wages of, in Massachusetts and Great Britain, 482
Chili, monetary unit of, 338; military successes against Peru, 440; tariff, 530; England's trade in cotton goods with, 689
China (ware), exports of, 610; imports of and revenue on, 613; prices, how affected by American tariff and manufacture, 621; introduced into France when, 639
China, area, 141, 537; immigration from, 148; displacement of Chinese labor by English machinery, 209; Adam Smith on wealth of, 215; unlike conditions of labor in, and lower earnings, 297; economic and climatic conditions, effect on the form of government, 402; political parties in, 404; tax-collectors in, 453; taxes in, 455; opium war on, 534; loss of sovereignty, as to tariffs, 533; exodus of the people would follow introduction of English railroads and banks, 536; sources of misinformation concerning, 536; opium trade detrimental to (Cobden), 536; size of army, 537; censuses fictitious, 538; analysis of their discrepancies, 538–541; absence of beasts of burden and machinery, 540; economic bearings of this absence, 540–545; limits on population in, 547; breath of religious toleration in, 550; internal trade of, renders external trade not essential either to supply or prices, 552; balance of trade in favor of, against the United States, 600; iron and steel first brought from by camel, 645; England's trade with, 689
Chinese empire, proportion of area and population to China proper, 541
Chinese, 148; immigration of, 321; paper money among ancient, 334; opium trade detrimental to, 536; social habits of the, 545;

must take American agricultural implements to China, 551
Chrematistics, 11
Christian world, in iron and steel, 645, 646
Church, increasing utility and diminishing cost (value) as society advances (Elder), 324; effect of union with state, 402; attitude of state toward, in France, 403; and land-owning gentry in England, 406; of Rome, 418; pursuit of secular interests is healthier economically than excessive addiction to the enthusiasms of the, 446; church-rates in England, 477; number of clergy in France, 496; large proportion of women in orders, 497; vital in Russia, 530
Cider, England keeps protected cider and gives Ireland free cider, 493
Cigars, protection to manufacturers of, in England, 481; revenue on, imported into United States, by whom paid, 586; export of, 611; import and revenue from, 614
Cities, feeble class in, 121; again, 219; rents in, 238–243; comparative failure of government of, in United States, 405; in France, 416; taxes in, in United States, 468; rates in, 477; in England, built on trade in India, 486
Circulating capital, investment of, in fixed capital may produce crisis, 378
Civilization, relation of ownership to, 23
Civil service, in United States, 416; corresponds to bureaux, 416, 427; in India, 485; contrast in salaries paid to conquered and conquering race, 485–486
Classes, owe something to each other, 21; value to working, of an extra dollar, 583; fallacy of protected and unprotected, in United States, 320; governing, in republic, 416; rich and poor, in same district, must be compared as to crime, 442; effect of rank on crimes of men and women, 442; enterprising class, not same as lenders to government, 449; government in the interest of the English manufacturing class, 437, 438; in France, 496; of population forming British empire, 516; taxes on, in Germany, 528; social, in Russia, 526; free trade in England and United States as a class interest, 605, 606
Clergyman, invented power loom, 685
Climate, effect of, on economical and political institutions, 402
Clocks, American superiority in, 596; exports of, 610; imports and revenues, 613
Clothes, of wool, 672; shoddy, 672; trade in French and English, 674
Clothing, 520; wages in manufacture of, in Massachusetts and Great Britain, 589; strikes and losses in, 328; revenue on imports of, in United States, whom paid by, 586
Clothing wools, 679–681
Coals, trade between Belgium and France, 26; England, 27; accidents in mines, 32; quantity mined in Germany, 520; revenue paid by foreign producers on, imported into United States, 586; exports of, 610; imports of and revenue from, 613; consumer does not pay the duty, 615; world's product of coal in 1883, 650
Coasting trade, defined, 653; vessels in, how protected by navigation laws in United States, 652–654; effect of "free ships" if extended to, 654, 655; protected in England until 1849; ships built by foreign capital could not safely take part in American coast trade, 661, 662
Coercion, in the state, 433
Coffee, free American import of, 600; rise of price on, in Brazil when American duty removed, 600; export, imports of, 610, 613
Coffee mills, prices, 590; qualities, 596

Coin, asserted to be a form of credit, 6; amount of in United States in 1861, 221; not the sole money in certain senses and yet the sole money in others, 330; standard and subsidiary or fractional, 335; not of invariable value but less variable than bullion, 335; coins of United States, 337; of England, 339–342; value of the standard coins of all nations certified by the United States mint, 338; prices of rare, 340; of England, 342; demand for, produces financial crises, 377; history of debasing the coinage in England, 339–342; over-valued metal seeks the mint, 341; under-valued the melting pot, 342; total gold coinage of France, England and the United States, 386; paying out coin as a means of resumption, 529
Coinage in United States, 384; rapidity of, from 1851 to 1875, 366
College, electoral, in United States, how superseded, 419
Colombia, monetary unit of, 338; tariff, 530
Colonies, British, tariffs of, 530; protective, except in India, 531, 664; policy towards American colonies, 631, 647, 648; tariff policies of, identical with that of the United States—all protective, 664; British policy concerning colonies, 689
Colonization, 445
Colors, exports of, 610; imports and revenue, 613
Combinations of labor, 300–307; Jevons on, 302
Combing wools, 679, 680
Combs, export of, 610; imports and revenue (included in fancy articles), 613
Comitia, 412
Commerce, as related to trade, 6; Gossen's theory of, 94; how all commerce seeks to concentrate in markets, 100; regulating inter-state, in the United States, 159; if business is more commercial than manufacturing, labor's share is less, 312; crises in commerce, 371; subtracting coin from, 384; number of persons engaged in, in France, 496; should be confined (Jefferson) to importing articles we cannot produce, 596; America's foreign commerce increases seven-fold from 1840 to 1880, while percentage carried in American vessels declines six-sevenths, 656; British commerce, how "fed" as to its main arteries, 657
Commodity defined, 89, 197; defined by Marx, 91; what is a finished, 671
Common sense, and national safety, 570
Commonwealth or state, 57–60; power over citizens, 58
Commons, House of, 37, 133, 140; composed of, 406; origin and development of, from a body of petitioning tax suggesters into the supreme power, 408–412; ministers sit in, 411; members unpaid, 424; of Ireland, in 1799, plead for protection, not union, 492
Commune, Communal, Communism, 41–54; charitable and religious, 52, 54, 131; use of land, 134; disappearance of, 139; spirit of communism in voting taxes where but few of the voters are taxpayers, 474; share of, in education in France, 497; in Prussia, 523; workings of practical communism in Russia, 526
Communal taxes, 523; an economy in communal system in Russia, 529
Competition, as a price-maker, 90–120; between railways, 160; again, 220; in rents, 237–243; of uses for land, 246; with old industries stifles the young, 319; shut off in trade enforced on conquered countries, 463; protection to home industry is a form of international, 568; competing commerce between countries having like natural gifts and conditions, but unlike artificial and acquirable gifts such as dimensions in production, anteri-

ority, etc., which time and protection will supply, forms the theme of tariff contention, 568, 573; effect of competition between producers in different countries to make protective duties a means of relief from taxation instead of a tax, 586; domestic competition repeals all increase of prices caused by a duty and avoids any economic occasion to repeal the duty, 596; lack of competition among employers in countries reduced by spoliation of capitalists, 625; competition between Canadian and American producers, effects of on burden of duties and prices, 615–617; of Americans in silk production, 633–636; in glass, 644; in iron and steel, 646–651; Americans first expel the English from carrying-trade through protection, and are finally expelled by them through free trade, 652–664

Condor, 338

Confederate States, financial struggle with, 221, 353–355; declaration of war with, 417; effects of war on Northern prosperity, 380; fall in value of its notes, 353; represented the free trade and slave labor side of economic questions—causes of rebellion, 687, 688; experienced in making salt, 694

Confederation of German States, 515, 521–525

Conflict among economists, 5–9; as to government, 131–133; as to money and prices, 343; as to theories of equality in taxation, 456; as to incidence of taxes, 459, 460, 467

Congo, socialism on the, 23; also slavery, 23, 41–54

Congress, action of, as to railways, 145–161; as to contraction of currency, 392

Connecticut, in 1790, 140, 252, 546

Conquest, of barbarians for trade purposes, profits of, 484; of India, how effected, 484; of sovereignties merged in Germany, 522; of China as respects tariff, 534–536; of Japan as respects tariff, 553, 554

Conscription, 437

Constitution, in all countries, 404; in United States, 407; Calhoun's definition of constitutional government, 413; power to declare war, 417; executive and judicial departments directly govern, legislative and constitution check or control these in governing, 416, 417; electoral college in United States shorn of its constitutional responsibility by reason of its meeting at different points and voting at the same time, 420; constitution regarded as distrusting the wisdom of the people, 420; its most original and admirable feature, 426; constitutionality is habit in England, 426; checks and balances of constitution in United States, 132–135, 427, 428

Constitution of United States should be amended (Jefferson) to allow internal improvements out of surplus revenue rather than reduce duty on salt, 640; inhibition on interstate duties may be an economic burden in part, 665, 666; of "Confederate States," 688

Consumer, causes value, 86; his place in industry, 87, 94–100; how affected by grain-dealing on boards, 106–120; consumer's wealth, 216; riches can not add to capacity to consume wealth, 224; relation of consumer to cost of rent and produce, 242; consumers produce prices, 320; of British beer pay more (Shadwell) because of protection to brewers, than they would if they had free trade in beer, 482; Doctrine that "consumer pays the duty," forgotten in Act of Union, England taking the "taxed goods" and giving Ireland "free goods," 493; increase of demand of consumer causes improved tillage in Germany, 520; consumer does not always

pay the duty, 533; duties which consumer does not pay, 586; *Chicago Tribune* on what the consumer pays, 593; how duties repeal themselves so far as they are protective taxes, 596; class of imports on which consumer can not be charged with the duties—the producer pays them, 610–617; consumer of French woolens, 672; of English, 673; consumers of wool (manufacturers of woolens) combine with producers in framing American tariff, 677, 678; fallacious estimate of the increased cost of wool to consumers, 682; contradicted by the testimony of an association representing the entire force of wool consumers, 681

Consumption, of meat, bread and spirituous liquors in the United States, 25; is the motive to production, 88; of commodities distinguished from consumption of wealth, 197; consumable wealth not the subject of avarice, 205; demand for, how controlled, 220; total consumption by people in United States, 224; limits on, 225; of rich and poor, 226; effects of taxes on, 458; taxes on consumption of luxuries advocated by Dr. Smith, 461; consumption of wool in France, England, Austro-Hungary and America, 672, 673; influence of, on production, 256–263; of a domestic product involves home consumption of two products, foreign of one, 560, 578, 579

Contracts, freedom and number of, grow with private titles, 23

Contraction, after inflations of currency, 359–360, 391; effect of, on prices, 392

Convention, House of Lords once a, 408; system of nominating by, 422

Convicts (in United States), 440; Means of reforming, 445

Coopers' tools, export of, 596

Co-operation, concealed under the forms of feudalism, 225; experiments in, 313; at Guize, Minneapolis, Peacedale and New York, 313; to succeed as a business must profit employer, 314

Copper, sole money in early Rome, 334; coinage in England, 342; German trade in, 519; revenue paid by foreign producers on copper ore, 586; exports of, 610; imports of and revenue from, 613

Copyright to authors and publishers a form of protection to industry, 675

Cordage, England hangs Irishmen on free rope but Englishmen on a protected rope, 493

Cordova wools, 672

Corn, law governing price of, 96; how in 1795–6, 96; price depends on demand, 96; dealing in on Produce Exchange, 105–120; effect of short crop on price in 1881, 106, 117; prices of, from 1780 to 1880 in England, France, and America, chart 112, 115–117; Tooke on prices of, 115, 117; effect of seasons on prices, 113; effect of cost of production on prices, 114; prices of, in 1620 to 1812, 116–117; cornering the market, 104; cost of wheat producing, 219; rate of multiplying, and effect of thin planting, 231; of rents and transportation, 247; not made cheaper by repeal of protection to, 118–121; but crisis produced by change of source of supply, 376; Ireland's interest in duties on corn, 491; export of corn prohibited by Colbert, 501

Corn crushers, American export and quality of, 596

Corners, in grain, 101–111; in labor, 300–302

Corn laws, agitation for repeal of, aided by errors concerning prices, 1812–1817, 112, 119; Brodrick, Shadwell, McCulloch, Encyclopedia Britannica, and Hyndman on, 117–120, 553; effect of repeal of, 470

Corporations, ownership by a form of private wealth, 54, 57, 134,

135, 139, 151–160, 220, 221; advantages of corporations over individuals as producing agents, 57; shares of, sell at a sum on which they will pay double interest, 179; stock of, how controlled, 220; tendency is toward corporations in labor employing rather than co-operation, 314; power of Bank of England to avert or promote crises, 389; power of corporations succeeds that of eloquence and political managers, 402; taxed in China, 455; debts of, held abroad, and crises, 377

Cost, of liquors, meat and bread missions and instruction in United States, 25; of production as a cause of value, 11; not measurable, 11; nor computable, 355; repudiated by Tooke, 114; relation of, to utility and value, 81–99; error to suppose prices are immediately regulated by, 110; yet in long run how affected, 220; of a credit currency, 356; a fiat money or labor money without cost impossible, 358; desire to display cost, 475; cost of collecting revenue in England, 479; of beet sugar in 1799, 503; tariff duties sometimes count as part of producer's cost, 532; cost in effort not identical with cost in money, 574; cost of supplying the conditions which render American markets the best in the world, 575; of machine labor is not synonymous with cost of human labor, 209, 580; all costs of commodities, services, and all expenditure is a compensation to labor, 626; of beginning a new manufacture, 639; of British policy of subsidizing ocean-going vessels (659) compared with the profit, 663

Cotton (wool or raw material), price of, when crop is large or small, 96; capacity of one man to produce, 220; growth in manufacture in war of 1812, 380; protected, 383; relation of to slavery, 384; value of destroyed in India by failure of manufactures, 488; converted into manure, 488; manufacture of, in Canada, 531; interior trade of Chinese in, 552; cultivation of, partially extinguished by importations in Japan, 554; wages in manufacture of, 581; in United States, France, and Great Britain, 581, 582; fibre of, compared with wool, 672; physiology and antiquity of the cotton plant in India and China, 683, 684; modern growth of the cotton manufacture, 684; inventions connected with its modern evolution, 685; production of "cotton wool" stimulated by a protective duty, 686; invention of the gin, 686; export of cotton, rapid growth of, 686; average price of (shown by chart) from 1790 to 1844, and Carey's statement of decline in values of cotton, 687; cotton famine in Lancashire during American war, 689–691

Cotton gins, American export and quality of, 596; invention of, and effect on production of cotton, 686

Cotton goods, protected, 383; protection of, in United States opposed by producers of raw cotton, 384–385; manufacturers of in India petition for the same protection from English goods as England exacts from theirs and are denied, 487; former manufactures in Turkey, 490, 513; trade of England with Zollverein German states in cotton goods, 519; weight of imports and exports, 519; acts to protect manufacture of, in England, 555; effect of import of, from England into India, 66,67; exports of, from United States, 610; imports of and revenue from, 613; American cottons lead in English markets in quality, 623; necessity of manufacturing the entire American cotton crop in America at an early date to keep

labor employed, 628–629; manufacture protected in Canada, growth, mills, capital, hands, product, and prices, 664–668; kinds of cotton and woolen goods produced in Canada, 666; Cotton trade in the germ in 1795; rapid growth of, and of city of Manchester, 685, 686; extent of production of cotton goods in England in 1861, 689; American imports and exports of, 691
Cotswold wools, 672
County, debts of, in United States, 448; rates for county uses in England 477
Coventry, decline of silk weaving in, 636
Credit, conflict as to its being capital, 6; grows with private titles, 23, 211; credit is wealth, 67; Confederate rebellion subdued on credit, 221; credit money, 335; relative quantity used, 344; exchangeable credit is *quasi* money, 346; credit attracts gold, 350; credit based usually on securities or debts receivable, 352; volume of, 355; how inflations of credit may be caused by reduction of tariff duties, 382–385; and expansions in volume of notes and discounts, 387
Crime, in Great Britain, 32; in Ireland, 33; in Austria, 33; homicides in Southern States, 34, 57–60; crime abated by war, 221; right of free speech does not extend to incitements to crime, 307; relation of crime to the state, 431; extent of, in United States, 440; crime a problem in economics, 441; offspring of liberty, 444; land not alienable for crime in Russia, 526; colonial manufactures and exports of machinery to American colonies made criminal, 647, 648
Crises, relation of labor to, 190; large capitals lessen suffering in, 222; crises of various kinds, 371; of 1857 in England, 376; exhaustion of capital produces, 378; cause of crisis of 1837 in United States, 382-385; due to delay of profits on good enterprises, 391; crises minimize the pain of failure in industries no longer socially needed, 396; and steer invention and capital into needed channels, 397; may be the penalty of mismanagement or ignorance on the part of government, 397; of 1816–1819 in United States, 514; of 1833, 515; silk mania and crises 1828–39, 632, 633; peace and free trade crisis of 1818–19, 641, 642
Crockery, decline of tariff tax, with increase in domestic production—the duty not identical with the tax, 621
Crops, how values of increase, 258; share of, taken for taxes, 455; ratio of crops to taxes in India, 486; rotation of crops under protection, 570, 571
Crusades, 447, 550
Cuba, monetary unit of, 338; trade of with United States, 600
Culprits, 440
Crown, unit of Denmark, Norway, Sweden, 338
Crown, lands, produce from, 479
Cultivation, began where, 645; the quality of, depends on nearness to markets and position relative to demand, 241–253; extensive cultivation exhausts soils, 253–256; intensive improves soils, 256–274; of food plants, evolution, 275–280; decline of, in Ireland, 274; of land in India, 486; labor turned to cultivation of land by crises, 397; land going out of cultivation in Turkey, 490; of vine in France, 497; of land in Germany, 520; ratio of tillage to entire area in Belgium, New Jersey, China, 540; England, Wales, Kiangse, France, Yunyan, Switzerland, Illinois, Foo-Keen, Connecticut, New York, Massachusetts, Rhode Island, and Kwei Choo compared, 546; wheat-lands of England go out of cultivation after repeal of corn laws, 559

Cultivators (machines), superiority of American abroad, 596
Cunard Line of steamers, by what means it killed the Collins line, 657, 664
Currency (see Money), national debt is international currency, its payment contraction, 354; relation of, to prices, 386–389; of Russia, suspensions and resumptions on 528, 529; acts to protect in England, 555
Curry-combs, export of, 596
Customs, revenue from, in United States, 468; chart showing ratio of customs to total revenue in United States, 469; how the same duty can produce both revenue and protection, 469; revenue from, in England, 479; decline in, since 1858, 480; increase on tobacco, 480; number of customs officials in Great Britain and United States, 482; customs of France, 498; customs union or "Zollverein" in Germany, 514
Cutlery, American errors taught in the colleges but corrected in the factories, 594–598; whatever people can make buttons with which to buy cutlery can make cutlery with which to pay for the buttons, 596; if we have the bones we should make the buttons—if we have the ores we should make the steel, 598; Jefferson says so, 598; English manufacturers pay part of American duties on, 621
Cut nails, American report of, 596

D.

Damascus, once a centre of the cotton and steel manufacture, 490
Dearness, no check on consumption, but a stimulus, when the motive of consumption is display, 475; British beer made dearer according to free-trade theorists by lack of free foreign beer, 482; permanent dearness ensured by breaking down domestic sources of supply wherever the foreign supply is inadequate, 510; is in inverse ratio to weight (fine goods make small parcels), 518; better than cheapness as to things nationally desirable (Mill), 557; in implements the best is cheapest whatever it may cost (*London Times*), 596; when protection against importation does not involve dearness in first instance, 609; no protective duties occasion dearness but those that are stimulating a new industry, 624; cost of beginning new industry (glass), 639; dearness of the cheap goods got under low duties but paid for by war of 1861–65 and loss of American carrying trade, 648–650
Debasing coinage, in England, 339–342
Debt, effects of, 211; on value of currency, 221; on credit and cash payments, 221; the basis of credit, 352; Foreign debt may produce financial crises in country owing it (McCulloch), 377; bad economy to pay debt with tools of trade, 383; debt of United States extinguished, 384; has certain effects of contraction, 394; Fawcett on, 392; MacLeod on, as a means of payment, 393; expenses of, in Europe and America, 438; chart of growth of, 447; aggregate debts of nations, 448; aggregate of public and private, in United States, 448; Adams and Fawcett, Lord Derby, *Iron Age*, and Professor MacLeod on economic aspects of national debt, 447–451; political aspects of national debts, 450; repudiation or collection, 450; European debts cannot fall due, 450; are savings banks, 450; effect of paying off national debt, 450; national borrowing tends toward socialist expenditure, 451; interest on debt of United States in 1883, 468; interest on debt

of England, 479; expenditure on debt in France, 497; export of, from United States to Germany, 518; alleged scaling of debt in Russia, 529
Declaration of Independence, theory of equality in, 132
Declarations of war, practically obsolete, 417
Decline, of cultivation of wheat in England, 559; of silk manufacture in England under free trade in silks, 634; of importation of raw silk into England 635; Porter on, 635, 636, 637; of American shipping under free trade principles applied to carrying trade and iron and steel industries from 1816 to 1855, 640, 652–664; of wool production and sheep in America under tariff reduction of 1883, of wool grown in England, 681; decline in price of cotton caused by expansion in its production, 687; in price of Michigan salt, 695
Deductive method, defined; is metaphysical and *a priori;* Mill and Ricardo are exponents of; begins in assumption and ends in obscurity and error, 9–14
Defence, national, things essential to, 556; conviction of "Confederate States" after the war, 688; manufactures essential to, 688
Definitions of terms: Political economy, 1–9; economic philosophy, 1–9; evasiveness of economic definitions, 5, 12, 211; metaphysical method, 9; historical method, 17; ethics, 22; of statistics, 24; Manchester school, 40; wealth, 41; poverty, 42; Carey's and Fawcett's definition of wealth, 43–48; family, 60; social wealth, 63; national, 67; the want pressure, 77; value, 79–87; wage fund, 87; demand, 87; commodity, 91; anarchism, 91; wealth of two kinds, 92, 216; Gossen and Jevons' theory of value, 94–99; markets, 99–102; prices, 102–124; title, 125–140; land system, 140–150; railway system, 150–162; employers and workers, 152–168; profit, 163–184; wages, 184–187; reproductive and enjoyable wealth, 216; of value of land, 237; of economic rent, 238; of labor, 281–293; by Devas, Perry, Elder, Adam Smith, Roscher, McCulloch, MacLeod, Mill, Jevons, Carey, Ricardo, Cairnes, 281–294; of money, 329–336; bills of exchange, 346; of free coinage, 361; crises, 370; of despotic and free government, 404; of monarchy, 405; of aristocracy, 405; of bureaucracy, 406; parliamentary government, 406; responsible government, 406; of republic, 412; of federal republic, 415; of the industrial state, 443; functions of political state, 433–435; crime, 441; farming the revenues, 477; poll tax, 53; of local taxation and national in United States, 468; of rates, 476; of ad valorem duties, 481; of British free trade, 491; of German Zollverein as designed by List, 514, 515; of mir and artel in Russian communism, 526–529; of production, 533; of American vessels and of ocean and coasting trade, 652–653; of the state as the sum of all industries that are intrinsically profitless, but socially profitable, 700, 701; of private and public purposes, 702, 703
Degrees, sale of taxed, in China, 455
Delaware, colony of, protected sheep and wool manufacture, 676
Demand, cause of value, 88; governs distribution of wealth through investments of capital, 213; how controlled by large capitals, 220; causes rents, agricultural and urban, 237–243: views of economists on, 237–243; of American women for silks, 633
Democracy, due to equality of economic conditions either

among all or among the dominant class, 402; entire absence of capital is democratic, 402; except as to the slaves, 402; largeness of the class it means to serve, 424; democratic party under Jefferson regard a surplus of revenue as not a good reason for withdrawing protection from salt, 640
Denmark, monetary unit of, 338; government of, 407; our balance of trade with, 599–601
Deposits in bank, 349; run for, and crisis, 371–373, 377, 385–389
Destruction, of industries the only alternative to protecting them, 461–462, 561; Shadwell on, in Dutch Indies, 480; Humboldt on, in Mexico, 480; of opium in China, 534; of Chinese manufactures, needs only a free introduction of English means of transportation and lending money, 536; destruction of values by strikes, 310, 328; of Roman farming by distribution of free corn, 317; requires more wisdom (to avoid doing injury) than protection, 561; of Portuguese wool and woolen industry by treaty, 669; of quinine in United States, 692
Diet, vegetable, its relation to industry, 298; of the poor in India, 486, 487
Dimensions, when cheapness in production depends on, it must begin at some relative loss, or not at all, 319; of iron and steel manufacture essential to cheap iron and steel, 509, 652; in cotton production, effect on price, 687
Direct taxation, in England, 476; difficulty of telling how much any area pays, 478
Discounts, liberal, may produce the inflations which end in crises, 389
Discriminating duties, 652, 665; discriminating port and dock dues against American ships, 655
Distillers, incidental protection to, 482
Distribution, of returns of industry between rent, wages, interest, and profits, 173–184; of commodities distinguished from distribution of wealth, 196; of wealth precedes production of commodities, 196, 198; economic distribution is just, 199; its relation to philanthropy and charity, 200; Mill, Ingersoll, and Karl Marx on, 200–215; by investment and by luxury, 213–215; equality of enjoyable and consumable products compared with inequality in control of reproductive wealth, 199–212, 224; crime aims at a redistribution by unlawful means, 441; of taxes in Great Britain, 476; of industries in France, 496; of wealth and work under the Commune in Russia, 526; of product as affected by depriving working classes of free access to the land, 574
Disunion, allied to free trade in all nations, 627–630
Diversity of industries, essential to happiness as well as industry, 317–319; how to effect it, 382; in France leads to self-employing, 496; is not inequality of facility in producing the same thing, but equality in producing unlike and exchangeable things, 513; protection only increases prices when increasing the diversity of industries, which reduces prices, 564; northern States grew rich during war of 1861 to 1865, owing to, while southern States were wasted by lack of, 688
Diversity of natural gifts, gives rise to a commerce which protectionists put on the free list, and free traders in some instances place high duties on, 573; it is only artificial gifts—capital, anteriority in production, etc., that protectionists desire protection against, 573
Division of labor incident to large capital, compact populations, and great diversity of pursuits, 219; effect of lack of, on mental condition, 317

Dogma, substituted for inductive science, 571
Dollar, of United States standard, 336, 337; of Canada, Liberia, Mexico, 338; Wendell Phillips on the moral value of a dollar, 583
Dominion of Canada, report on manufactures, 664–668
Donskoi wools, 672
Door-knobs, English and American, prices of, 590
Door-latches, American, export of, 596
Doubloon, 338
Drachma, monetary unit of Greece, 338
Drain, of rent to foreign landlords, 487; of native wealth to pay for forced importations (Japan), 554
Drainage, a local rate for, 477
Drink, cost of, 24; of beer in England, 482; of wines in France, 497; effect of, on labor in Russia, 527
Drugs, protection to in 1828, 383; export of, 610
Dry goods, American market the cheapest, 623
Dutch government in East India, order destroying spice trees, 480
Duties, effect on price, 25–26; when they come in as protective, 319; in 1861 duties on imports sustained the credit of government, 353; protective duties may prevent commercial crises, 374–390; under tariff of 1824–28, 383; change from ad valorem to specific, 383; low duties produce universal disaster in 1837, 382; and 1857, 385; made protective to manufactures by Institutes of Manu in India, 453; revenue from in United States, 468; Turkey limited to 3 per cent. duties on imports from 1675 to date, effects of, 488–492; duties high on Irish goods going into England, low on English goods going into Ireland under Act of Union, 493; Dr. Smith on protective and retaliatory duties, 556; must either cause revenue only or suppress or protect production, 563; protective duties repeal themselves at the proper time, 563, 564; are for revenue only, "wherever there is and can be no competing domestic product," 573; provided domestic competition is not prevented by law; in which case they are for revenue plus the destruction of native industry, 481; paid by foreign producers, schedule of, 586; Mill's concession bungling but adequate to the point, 587; duties in other countries reduce profits of English producers, 588; working of duties relatively to bounties, 596; importing non-competing (tropical) products free works no increase in our exports to countries producing them, 600, 601; on agricultural implements, 610; articles on which duties chiefly paid by foreigners, 610–613; on silk in United States, 634; in England, 637, 638; effect of repeal of, 635, 636; on iron and steel rest on manufacturers of iron and steel goods, 647; discriminative on iron and steel carried in British ships, 648; discriminating duties on tea brought in American ships, 653; progressive duties on wool proposed by Benton, 676; tariff on since 1824, duty on carpet wools a revenue duty, 678; comparison of invoice prices with foreign quotations on wool show that foreign prices "dip" downward by amount of duty to get the wool into American market, 679, 680; chart showing who pays duty on wools, 681; on salt in United States, 695; effect of reducing American duties to send up foreign prices, 695
Dye-stuffs, duties on and export of, 610; on wool, 672; in France, 674; Tyrian dyes, value of, in Roman purple, 669; from coal tar (aniline), 669

E.

Earthenware, export of, 610; im-

ports of and revenue from, 613; prices in New York, how affected by duties and production, 621
East Indies, balance of trade against United States, 600
East India Company exported none but English cloth, 670
Economy, in the individual concurs with progress of society, 308; of coin and credit, 355–358; Adam Smith on, 356; in the wage contract, retailing, etc., 433; economics of the Chinese but little known to western nations, 548; Chinese economy has its credit side, 549; as well as its debit side, 543; economy of protection, 609–630; in iron and steel, 648–650; in the subsidy policy of England, 659–663; in privateering as compared with subsidies, 663; false economy of United States mail service nets both loss and disgrace, 664
Ecuador, monetary unit, 338
Edge-tools, wages in American and European, 581; Canada exports, 668
Education, and the State, 434; and crime, 441; illiteracy in France, 497; expenditure on, in France, 497; care of, in Germany, 521, 523; in glass-making, 644; a mode of protection, 675
Effort, tariff required to protect where equivalent effort produces, 585
Eggs, yolks of, duty and revenue on, 586; exports, 610; imports and revenue, 613
Egypt, civilization attended private ownership in, 23; early use of money in, 334; present unit of coinage and its value, 338; taxes and tribute in prehistoric, 452, 453; tribute paid to Rome, 454; food exported during famine, 570; ancient use of glass in, 638; iron and steel in, 645, 646; England's trade in cotton goods with, 689
Elbe, change in commerce on the, 518
Elections, cost of, in United States, 414, 416; modes of, in use prior to American constitution, 418; where many constituencies vote separately and simultaneously, an anterior nomination results, 419; electoral commission, 421
Eloquence, its period of ascendency in government, 402; British and American speeches, 411
Emancipation, in Russia how effected, 526
Emigration, always at first attended by hardship, 318; a subject for state aid, 417
Empire, British, maintained by military force for profits of trade, 484
Employment at wages, beginnings of, 164–170: wages system economical and equitable, 170–181; conditions of, in compact centres of industry, 210; qualities that promote success and utility in, 307, 308; employment in industry is the only actual organization of labor, 310; strikes in various employments, 328; employing class larger in France than in England or United States, 496
Employers, losses to by strikes, 310, 328; in silk industry in America, 633; in silk trade in England, 739
Enforced trade, 483–491, 516; Germany has none, 516; in India, 483; in Turkey, 488; in Ireland, 491; in China, 536, 553; in Japan, 553, 685, 686, 689; England's coerced trade five times greater than all others, 689
Engine, steam, invention and effect of, 680, 681, 684
England, trade between, and France and Belgium, 27; railway travel in, 28; displacement of labor in other countries by machinery in England raises wages in, 209; possible production of wheat in, 231; relative wages in, 315; it practices not free trade but military protection, 316; intended free coinage of silver but failed, 362; Bank of

England producing panics and crises for profit, 389; government of England free, 404; parliamentary, 406; responsible, 406–412; England practices military and subsidy protection to foreign trade, 431, 432; an army-made state, 439; monopoly of opium production, 456; crises of 1825–6 produced by resumption, 371; crisis of 1847 by free trade, 374–376; crisis of 1857 produced by bankruptcy in United States caused by free trade, 376–380; crisis of 1866, 389; methylated spirits, 476; local taxes in England and Wales, 476; paupers in, 478; cost of paupers, 478; and of army, 478; prohibition of cultivation of tobacco in, 480; highest known duties on imports laid by, 481; governs for profits of trade, 484; a career and a market, 484, 485; England gave Bengal a freer trade than herself, 487: same to Turkey, 489; permitted protection in Ireland from 1782 to 1800, 492; Act of Union a measure of free trade to Ireland and protection to England, 493; contended for free trade in Germany, 514; pyramid of England's industrial power, 516; her monopoly of barbarian markets, 521; her forced seizure of Chinese markets, 533–535; population to square mile of, compared with China, 545; average crop of wheat per acre in any county in, 254; relative labor-cost of producing iron in England, Pennsylvania, and France, 573; wages in England compared with Massachusetts, and with United States, 581, 582; American balance of trade against England, how adjusted, and net balance tending to an increase of coin, 599–602; silk manufacture destroyed by free trade in silks, 635–637; total value of manufactures of all kinds, 637; stifling American manufactures (Brougham), 642; population, and iron and steel manufacture in, for a century, 646; product, 1883, of iron, steel, and coal, 650; course of, in building up her carrying trade, 640–660; and in inducing Americans to allow and aid in the destruction of American carrying trade, 640–661; wool supply of, from 1850 to 1883, 673; consumption of wool compared with United States, 673; brief advantage over France in woolen treaty, 674; Napoleon's war on England industrial as well as military, 674; triumphs in the former, 675; prices and incidents of cotton famine, 690

English spoliation in India more disastrous than Parsee or Mohammedan conquests, 487; in Turkey, 488–491; in Ireland, 491; early England in wool and woolens, 668, 669

Enterprise, defined, 163; distinguished from loans to government, 449; how destroyed among the Hindoos, 485; private enterprise (Moffat) not called on to make the sacrifices required in initiating a new industry against certain foreign superiority, 563; Devas on same point, 568; *entrepreneurs*, larger proportion of, in France, 496; small in China and India, 623–626; consequences to labor, 625; private enterprise liable to be misapplied where state aid is also, 632

Equality, theories of, in taxation, 456; equality in industrial claims of Irish (491), Hindoo (488), with English not recognized, 488–491; of effort protected by tariff, 585

Equilibrium, of industries, Jefferson on, 598

Escudo, coin of Chili, 338

Ethics, relation of economics to, 22; no ethical perfection in government, 440

Europe, rates of wages in, 581; our balance of trade against, 600; how adjusted, and net balance in our favor, 601; first glass

manufacture in, 639 ; the primitive brown race in, 645
Evolution, of historical method, 16 ; scientific, 23 ; of economic progress in America, 36 ; of House of Commons, 37, 408–411: of civilization, 42 ; of society, 49 ; from communism, 51 ; to private wealth, 55 ; of the family, 60 ; of national power, 65 ; of a correct definition of value, 80–92 ; of true theory of value, 94–102 ; of markets, 100–106 ; of a sound doctrine of prices, 107–121 ; of titles, 127 ; of monopoly, 130 ; of laws, 133 ; of rights, 135, 137, 139 ; of immigration, 147 ; of railways, 151–160 ; of true theory of wages, 163–183 ; and of distribution of wealth, 184–205 ; of capital as a laboring agent, 208 ; of a distorted rent theory, 239 ; of the true doctrine, 243 ; of cultivated plants, 275 ; of a true definition of labor, 282–290 ; of money, 330–336 ; of freedom, 359 ; of occupations causes forms of government, 403 ; of responsible and parliamentary government, 401–412 ; of beet sugar, 503–506 ; of German industries, 514–521 ; of German empire, 521–525 ; of silk manufacture, 631–637, 638–644 ; iron and steel, 644–652 ; English and American shipping, 652–664; of Canadian manufactures, 664–668 ; of wool and woolen industries in Europe, Australia and America, 668–682 ; dependent in United States on the iron and steel industry, 677
Exchange, why men exchange, 91; in markets how conducted, 99–120 ; theory of equivalence in exchange not an unerring one, 109; usually equitable, 110; title the source of, 137 ; equivalence between employer and employed, 171–182 ; the surplus of one industry depresses its own price, but gives value and price to that surplus of another for which it exchanges, 320, 321 ; money as a medium of, begins in treasure, 329–331 ; bills of, a form of credit money at times, 335, 346 ; arises out of diversity of production, but not out of inequality in producing same things, 513 ; equivalence does not dispose of the protectionist argument of two capitals and two sets of laborers on home product, one on imported, 560, 561 ; "exchange is exchange"—the formula that dispenses with all other knowledge (Perry), 571 ; of wool for cloths between England and Burgundy, 669
Excise, 454, 476, 479 ; excise duties rest on what articles in England, 481 ; none on tobacco, 481; on beet sugar in France, 505
Executive, a unit in all governments, 416 ; large control over the war power, 417 ; compared to a premier, 417 ; or czar, 417
Expansion in volume of currency, 385–388
Expediency of protective tariffs, 565
Expenditure, on government, 428 ; on armies, 424 ; on education in Northern States, 434 ; in local government and cities in United States, 468 ; on war, navy, Indians, pensions, etc., 468 ; local in England, 476 ; on poor, 478 ; on navy and fleet, 478 ; on post-office, 480 ; on school and education in France, 497 ; on land and sea forces in France, 497 ; on debt in France, 497 ; of Germany and Prussia compared, 522 ; on schools, 523
Exports and Imports, 26–28, 34 ; relation to prosperity, 35 ; excessive exports produce English crisis in 1857, 377 ; of gold in 1851 to 1860, 386 ; duties on, in China, 455 ; of manufactured tobacco to England, small, 481 ; of leaf tobacco, 480 ; tax on in Turkey, 488 ; of machinery for working flax prohibited, 489 ; export duty on cloth laid by Irish parliament, 492 ; of food, raw materials and manufactures from France, 500 ; of beet sugar to

England, 505; change of exports from raw materials to finished products in Germany under protection, 517; value of exports in inverse ratio to weight, 518; of bonds from United States to Germany, 518; of lumber from United States, 532; every protected article, incapable of domestic production at first, becomes capable of export at last, 564; countries which export food not therefore growing ones, 566; habitual export of food tends towards famines in the food producing country, 570; the exports and imports free traders encourage are those in which both countries have the same natural facilities and differ only in anteriority, 573; protectionists alone desire a commerce based on difference in natural facilities, 573; export in large quantities of an article proves a higher or equivalent price abroad to that prevailing in the country of export, 591, 592, 609; but is not in conflict with a small import from producers locally favored as to nearness, cost of production, etc., 593; in such case the duties collected on the import are a deduction from a producer's price which is not made greater by them, 593; and are an international tax, 594; American export of iron and steel wares displacing those of Birmingham with less than eight years of protection, 596; no more exports desirable than will pay for what we lack the natural (not acquired) facilities to produce, 598; exports are not dependent on our willingness to import any competing product, 599–601; exporters have essentially nothing to do with importers, 601; capacity to export limited to highly transportable goods, 602; export of glass in 1818, 641; of machinery and artificers from England made a felony, 647, 648; American exports and imports, how carried, 656; export of wool from England prohibited for 165 years, 670; present export of woolen goods, 673; large ratio of exports of cotton to domestic consumption in Great Britain, 685; effect of export trade in cotton goods on Great Britain's foreign policy, 689; of butter, 696

F.

Factory, relation of, to the farm, 320; to home manufactures in Russia, 527; increase of, in Canada, 667, 668

Failures, diminish as means of payment increase, 221

Fairs, precede markets and cities, 100

Fair trade, Thorold Rogers on, 557

Fallacies, in Mill, 10–15; in histories of political economy, 8; alleged in mercantile school, 18, 19; Cossa as to statistics, 24; of effect of disproving statistics, 24; of taking part for the whole as to American cost of drinks relative to food, 25; Springer as to tariff duties, 26; in Fawcett as to effect of cheap bread on crime, 26; as to safety of railway travel, 29; prosperity of free and slave States, 33; homicides in South and federal intervention, national prosperity not measurable by foreign trade, 36; of resting value on labor, 84; of Dr. Smith's theory of invariable value of labor, 85; of Karl Marx's theory of value, 91; of theory that speculation raises prices, 100–110; of getting cheap breadstuffs by importation, 117; of resting title on labor, 129; of ideal theories of equal taxation, 456; of schemes of taxation which suppress a domestic production yet profess to take no money out of the pockets of the people except what goes into the treasury, 462; of the incidence of taxation, 462–467; of trying to inflict "suffering" or "sacrifice" on the rich by taxes, 463,

467; of Mr. Mill as to customs duties being inadequate to produce both protection and revenue, 469; of Adam Smith's notion that certainty of taxes causes economy in voting them, 474; of Bastiat concerning scarcity obstacles, etc., 506–513; of equivalence in exchange argument for free trade, 561; in George's land confiscation scheme, 126–129; in socialistic scheme of railways, 160; in Dr. Smith's theory, "labor causes all values," 167–175; in theory of declining profits, 191–195, 228–230; in theory that wealth must be distributed equally or injustice is done, 201–228; in Malthus's theory of population, 231–235; in Ricardo's theory of rent, 238–243; dear labor underworking cheap labor, 267; in Malthus's theory of population tending to outrun means of subsistence, 295–297; in the distinction between raw materials and finished products except as to a single industry, 311; of increasing wages by diminishing workers and consumers, 320; of protected and unprotected classes, 320; concerning Gresham's law, 368, 373; of objections to balance of trade doctrine founded on statistical omissions, 395; of M. Quetelet's ground of assuming that crime is not proportionate to poverty, 442; of Dr. Smith's giving his own opinion concerning Colbert and Turgot as that of "the most intelligent men in France," 501; of computing the saving on the non-production of a commodity which a country has all the natural facilities to produce which are possessed by any other, 504; of supposing cheapness controls the trade of countries whose trade conditions grow out of past wars, treaties, and other historic sequences, 517; of Chinese census, 538–550; of tariff for revenue only, i.e., without either protection or suppression, 564; of Perry's argument that importing foreign goods is not employing foreign labor, 572; of the "profit argument" for free trade, 576, 577; of Perry's application of Ricardo's theory, that dear human labor can underwork cheap human labor, 267; of the error that the import and payment of duty on a small part of a country's supply raises the price of the whole domestic supply, 591; *reductio ad absurdum*, that it converts the whole income of American producers of every kind into a collection of protective taxes from each other, 592; of predictions by McCulloch that free importation of foreign silks would not destroy English manufacture, 637; of domestic price of every imported or importable article being the foreign price plus the duty, 682

Family, relation of, in various periods, 60–65; unequal wealth of, in England, 273; regulation of, by government, 431; harmony of, in China, 552; resemblance of family unity to national unity, 575

Famine, in India, 331; causes, extent, and number of, in India, 485; in Ireland, 491; would result in China if opened to railroads, 536, 547; export of food continues during famines, 570; cotton famine in England, 690

Fanaticism as a social waste, 446, 447

Fancy articles, export of, 610; imports of and revenue from, 613

Farmers, cost of meat among, 25; ejectment of tenant farmers in Ireland on repeal of protection to corn, 26; in Persia, 51; ryots of India affected by loss of manufactures, 67; small and large farms, 73; prices of crops affected by scarcity, 96; relative power of consumption and production, 97; how affected by trade in grain in great boards and produce exchanges, 103, 112; profit made by them on short

crop of 1881, peas and oats, 107; production of farmers determined by market prices, 108; prices not determined by labor or cost of production, 108; products of as affected by seasons, wars, currency, protection, etc., 110–120; decline of acreage planted by farmers in Great Britain under free trade in corn, 118–120; profits of farmers in England, 178; inequality of conditions among, equalized by migration, 214; farming less favorable to the poor than city life, 219; economy of Dakota and bonanza farms, 219; Dr. Smith on farm rents, 238; true cause of rent, 238, 242, 243; how rent and transportation balance each other as taxes on farmers, 247–253; how many are tenant farmers in United States, 267; capitals in farms, 267; farmers being eliminated in Ireland, 274; decline of crops and animals after protection withdrawn, 275; simplest organization of farm labor is working on shares, 311; number engaged in, in United States, 320; farmers of the revenue in Asia and Africa, 453; farmers of India, how destroyed, 485; of Turkey, how taxed, 488; competition between farmers and its effects, 513; can have no trade with competing farmers, 513; in Prussia advance in tillage, 520; employed by the commune (mir) in Russia 526; farmers' prices and import duties, 591; butter, potatoes, grain, and flour not raised in price in United States by duties, 501; nor wool, salt, coal, and lumber, 591, 592; farmers of America are not the promoters of any free trade agitation whatever—importers not authorized to speak in their name, 604, 605; share of duties paid by farmers, according to Thos. G. Shearman, less than from 1 to 3 per cent. of the total, 612; farmers of Great Britain sacrificed to the manufacturers, 676; products of, exported, 610; yet a revenue derived from their importation, 613; rates of duty on farmers products, 610

Farming the revenues, in China, 453; Asia and Africa, 453; in Rome, 454

Federal union in United States and Germany, how formed, 514

Fertility of man relatively to animals and plants, 231–235; as an element in rent, 238–242; decline of, in certain countries and advance in others, 254–262; fertility changing to desert in Turkey through free trade and bad government, 490; how induced in Prussia, 520

"Fiat" (see Money)

Fig tree, taxed, but imports free in Turkey, 489

Finance of United States, in 1861 to 1875, 352–355, 386

Finished products, value of exporting, rather than raw materials, 322

Fire-arms, wages in manufacture of, 581; superiority of Americans in, 596

Fire-wood, revenue from, 586

Fisheries, taxes on, 454; English statutes to protect, 555

Fish, exports and imports of and revenue from, 610, 613; consumer does not pay the duty on, 615

Flannels, protection to, 383

Flax, duties on, 383; in Russia, 527; wages in flax manufacture in Massachusetts and Great Britain, 582; fiber compared with wool, 672

Florence, woolen manufacture, 669

Florin, 338; in England, 339

Food, rate of production of, 232; evolution of sources of food, 275–280; no food fund in nature, 295; fallacies of the fear of man outrunning means of subsistence, 296; effect of free corn on farmers of Italy, 317; consumer makes price, 320; of Hindoos, 486; imports and exports

of, in France, 500; from Germany, 515, 520; in cotton goods, 520; export of, in raw, ceases when embodied in finished products, 520; countries exporting food are not necessarily growing countries, 566; dependence of a country on foreign countries for food, 570; excess of food in a food-exporting country no guaranty that its people will not starve, 570; wages in food preparation in Massachusetts and Great Britain, 582; strikes and losses in, from 1881 to 1887, 328; butter in United States, effect of duty on price, 586

Foreigner, how made to contribute revenue under protective duties (Sidgwick), 565; dependence on, discussed by McCulloch and Devas, 570; on what articles foreigner pays the duty, 586

Foreign salt, lessened consumption of, in United States, 693; price, 697

Foreign ships, carry our imports and exports (659), because of the total withdrawal of protection from American carriers, 642, 653; causes, 659, 660

Foreign trade, protected by Great Britain effectively, 316; effects of in United States, 381–385; how classified in France, 500; limitations and restrictions having other than a protective design not to be charged to the protectionist principle, 500, 501; limited relatively to home trade by cost of transportation to articles combining small bulk and easy portability with large value, 600; restricted by the small number of products it can take, 602; involves military aggression and a universal and incessant drumbeat, 685, 686

Forests, waste of and extent of in United States, 148; taxes on in Roman empire, 454; women working in, in Germany, 525

Forfeiture of foreign vessels taking part in coasting trade, 652

Franc, unit of France, Belgium, and Switzerland, 338

France, silk trade of, 26; travel in, 28; military statistics under Napoleon III., 30; marriage in, 30, cost of wars in, 70; value of agricultural products of, 230; relative wages, 315; coinage of, from 1851 to 1856, 380, 386; monetary unit of, 338; change in social forces, 403; French government responsible, 407; as a republic, 416, mayors and police prefects appointed, 416; expenditure on army in, 438; M. Quetelet on crime in, 442; comparative loss of life by individual crime and social struggles, 446; credit, how maintained, 448; payment of German indemnity by, 450; producing tobacco, 456; but permitting subjects also to produce, 481; employers numerous in, 496; relative to Great Britain, 497; land-owners numerous, 497; value of wine manufacture, 497; of all manufactures, 497; of foreign trade, 497; government centralized, 497; protective duties in, 498; free and dutiable articles, 499; France and protection discussed by Adam Smith, 500–503; beet sugar, 503–506; her military relations to Germany, 515; proportion of land cultivated to population, 546; labor cost of making iron compared with that in England and Pennsylvania, 573; unity of, 630; under Colbert introduces manufacture of china, glass, carpets, and tapestry, 639; production of iron, steel, and coal in, 650; lines of steamers sustained by, 658; merino wools of, 672, Mauschump, wool of, 672; wool supply of, 673; beginning of the wool industry under Colbert, 673; brief mistake of French statesmen in 1786 concerning woolens, 674: triumph of Napoleon's protective policy

in Europe generally since 1816, 675; England's trade in cotton goods with, 689
Frankfort, 514, 515
Free coinage, 341, 342, 358–369; defined, 361
Freedom, relation of prices to, 121; diminishes in compact centres, with increase in power, but can still be had on the outskirts, with relaxing power, 210; capital emancipates labor, 212; how, 213; freedom of speech, when the intent of speech is to promote crime, 307; relation of money to, 329; created by the extra dollar (Phillips) after satisfying wants, 583
Free list, of England, 482; of India, 487; of Turkey, 488; of Ireland, 493; of France, 498, 499; coffee on, in United States, not in England, 600; American free list covers six-sevenths of all articles not producible in America, 601; but importing them free has no tendency to increase our exports to the countries which produce them, 601; we sell them only a fifth as much as we buy from them, 601
"Free ships," as a pretended American policy, a fraud, 661, 662; the counterpart of the Trojan Horse, 662
Free trade, associated with the Laissez faire doctrine, 15; making one world's market would impair wages in high standard conntries, 315; how under the name free trade protection may be practiced, 316; the argument that "all trade is barter" vindidates protection, 322; true free trade measured by freedom in paying for what we buy with what we have to buy with, 322; crises produced by free trade policy in England in 1847–8, and United States in 1854–7, in 1819–1837, 374–381; tends to over-trading, 377; produces crisis of 1837, 382; and of 1857, 385; imports increase and revenue relatively to imports fall under free trade, 469–472; how far British tariff is a free trade scheme, 482; internal trade of England less free than in United States, 482, 483; effects of forcing English trade on India, 483–488; free list in France, 499; free trade puts high duties on imports not producible in the country laying the duty, 480, 508; free trade soon brings dearness and scarcity, 509; wherever the domestic supply is the only one adequate to the demand, 510; list of Germany, at first an advocate of free trade, 514; how changed, 514; free trade theory covers coerced trade in practice, 553; exemplified in China, 534; and Japan, 553, 554; lowest duties known save in Turkey, 533; exceptions to free trade (Mill), 557; an argument of protectionists that no free trader can refute except by refusing to state it, 560; free trade in fact only a criticism, not a policy, 602; while it professes to let industries alone in the country adopting it, it really cloaks war on all nations, 628; its tendencies disintegrating, 629, 630; displacement of labor by, in silk manufacture in England, 635; American ocean vessels left to free competition with foreign since 1816, 642, 653; does not kill until foreign shipbuilders can build a cheaper ship, 656; then it proves fatal, 656; free trade pressed but declined in all British colonies, 664, 668; absolute free trade in wool and woolens kills the wool and woolen industries of Portugal and Brazil, 670; short career of mischief in France in 1786–93, 674; free trade in United States transfers American ships to England, and free trade in England transfers millions of farmers, wool-growers, and silk-makers to United States, 682; free trade the corner-stone of the Confederate rebellion, 687, 698; in

quinine, 692; free trade is the creed of unthrift in the United States, and derives its chief support from the thriftless classes, 699; the uniform sequence of prosperity after protection causes denials that sequence implies causation, *post hoc*, etc., 703–707
Free traders, irritable and supercilious tone of, 555-558: their error of style arising from bumptious intolerance combined with limited research, 558; Jevons and Perry do not meet the "one and two capitals" point, 560, 572; when free traders are not unpatriotic (Devas), 570; can not claim the "diversity of natural gifts" argument, as it belongs wholly to the protectionists, 572–573; the free trade contention is for free admission of competing products, and high duties on products dependent on unlike natural conditions, 573; Mr. Shearman contends that manufacturers in United States pay from 97 to 99 per cent of tariff duties, 611–612; downfall of American ocean carrying trade due to free traders' efforts to get cheap iron and steel by importation while England was getting it by protection, 648–650
Freight earnings must be added to exports of carrying nations to state balance of trade correctly, 395; of English ships, 663; how obtained, 659, 663
French school of economists, Bastiat, 3, 42, 234; Say, 9; La-Vasseur, 80; demand the cause of labor, Boisguillebert, 82; Condillac, 82; Cournot on markets, 100; Dupin, 70; Cordier, 70; Wolowski, 78; Godard, 189; Fontenay, 242; De Candolle, 275–280; Editor of Le Devoir, 313; M. Godin, 313; Le Play, 331; Baron de Rothschild, 364; Cernuschi, 373; Quetelet, 441–445; Bastiat, 506, 514; Colbert and Turgot, 500, 503, 639, 650, 673; Napoleon, 673, 675
Fruits, exports of, 610; imports of and revenue from, 613
Fuel, in making iron, 645
Furniture, wages in manufacture of in Massachusetts and Great Britain, 582; strikes in, 328; revenue from in United States paid by foreign producers, 586
Furs, exports of, 610; imports of and revenue from, 613
Futures, dealing in on boards of trade, economic aspects of, 104

G.

Gas-fittings, export of, 596, 610
Gaul, taxes in, 454
Genoa, woolen industry, 669
Georgia, silk raising in, 631, 632; present production of iron, 646; Robert Toombs of Georgia helps effectively to destroy American merchant marine, 657, 658; and earns contempt of British free traders by his subserviency, 658; woolen coat made in one day in, 671
German economists, Roscher, 24, 43, 50, 64, 122, 178, 240, 330; Karl Marx, on value, 88–94, 184, 189, 240; Soetbeer, 363, 366; H. H. Gossen, 94; Heine, Heeren, Hegewisch, Niebuhr, 139; Grünlund, 212, 176, 179, 306; List, 514–530
Germans, subscribed to French indemnity, 450; indemnify the empire for its absolutism, 524
Germany, accidents in mines, 32; fairs in, 102; value of agricultural product, 230; relative wages in, 315; experience in changing from silver to gold, 362–363; monetary unit, 338; emperor's power, 406; parliament advisory, 406; expenditure on army in, 438; empire founded by its army, 439; production and export of beet sugar in, 503–506; national unity and German empire promoted by protection to German industries, 514–520; trade of with England prior to 1827, 515; in raw materials kept Germany

poor, 515; its war with Austria in 1866–7 caused no debt, 516; war of 1870 with France, 516; industrial conditions of, 516; no enforced trade, 516: Germany leads in specified particulars, 521; causes of, 521; history of evolution of German Empire industrially, 514–521; politically, 521–525; heterogeneity and disunion of, under free foreign trade, 521, 522; revenues of, 522; rates of wages in, 581; American balance of trade against, 600; unity of Germany a result of protection, 630; superseding English in silk manufacture, 636; product of iron, steel, and coal in 1883, 650

German Empire, monetary unit of, 338; political evolution of, 521–525; industrial growth of, 514–521; vindicated in parliament, 524

Gig-mill, invention of, and effect, 681

Gimlets, export of, 596

Gin, Whitney's cotton, effect of invention, and nature of, 686

Ginseng, export of, 610

Glass, trade in between England and Belgium, 27; duties on, 383; in France, 498, 502, 503; German, 519; Victoria protects, 530; beginning manufacture of in Pittsburg, 578; rates of wages in glass manufacture in America and Europe, 581; England protects her own glass, but withdraws protection from Irish glass, 493; exports of, 610; imports of and revenue from, 613; history of manufacture of, in Egypt, Europe, and United States, 638–644; begun under Colbert's auspices in France, 639; in Scotland, England and American colonies, 639; Alexanander Hamilton's report on, 639; white green, flint, German, crown, and cut glass, 640, 641; total product of, from 1824 to date, 643, 644

Glue, revenue paid by foreign producers on, 586; export of, 610

Gold, tie between government credit and gold in 1861–5, 221; as an ornament, 331; followed silver in England, 334; the currency of capital and large investments in reproductive wealth, 339; quantity in use as money, 344; Adam Smith on relative values of gold and silver, 345; rate of production of, relatively to silver, 366, 367; how affected by drain to India, 373; can not afford to pay debts in gold when it removes an implement of business, 383; in arts, 383; gold penny, 339

Gourde, monetary unit of Hayti, value, 338

Government, on what qualities in, growth of wealth depends, 68; origin of, 131–135; changes in, 133; debts of, 352; is involuntary, instinctive, and beyond the collective power of society to dispense with, 398–399; among savages is tribal, 402; grows out of their economic condition, as being without capital, 402; if economic conditions are unequal becomes aristocratic, 402; climate, 402; occupations mould the form of, 403; remains an affair of party, 404; despotic when, 404; free, 404; judicial department most coercive, 416; the official class slightly larger in republics than in monarchies, 423; temporal and spiritual and secular, 428; general and local, 429; functions of local are largely economic, 429, 430; in all employment, 432; right to govern, 440; functions of expand, 455; its share of production, 454–455; practice of, sometimes better than theories, 457–460; local, in England, 477; British Empire governed for profits and not for revenue, 484; little local government in France, 497; of William and Bismarck approved, 514–525; taxes on liquors identify government with traffic in certain ways, 527; workings of Russian govern-

ment as to emancipation, resumption, and paupers, 520, 521; of China right in excluding forces tending to disruption of Chinese internal trade, 547; is the sum of all intrinsically profitless and socially necessary industries, 700, 701
Grains, duties on imports of, from Canada, 591
Graziers, taxed in Turkey, 488
Great Britain, crime in, 32; origin of its House of Commons, 37; commons and private lands, 139; earnings of entire people, 176; value of agricultural products, 230; total gold coinage of, in 1851 to 1856, 386; monetary unit, pound sterling, value of, 338; extent of deposits in private banks, of, 389; total bank deposits of, 389; culture of the nobility and land-owning gentry in, 406; history of government in, 408–412; credit, how maintained, 448; local taxation in, 476–479; general taxation in, 479–483; tyranny in prohibiting cultivation of tobacco, 480; derives no revenue from outside dominions exeept profits of trade, 484; rates of wages, blacksmith and iron-puddlers, in 1867, 511; change in trade of, with Germany, produced by protection in Germany, 515; relation of, to her colonies, 530–533; unable to prevent their adoption of protective policies, 530–533; course of, toward China and Japan, 533–554; British protective laws, 555; and what occupations they protected, 555; rates of wages in, compared with United States and Massachusetts, 581–582; total value of British manufactures, 637; small product of iron and steel a century ago, 646; and imports, 646; population of in 1788, 646; Great Britain indebted to her protection to iron and steel and ship-building for her carrying trade, 648, 649; product (1883) of iron, steel, and coal, 650; product of pig iron from 1860 to 1883, 651; how Great Britain "feeds the main arteries of British commerce," 657; but can not influence the tariff policies of her colonies, 664; British legislation always animated by a protective motive, 675, 676; but it was a protection to the stronger, at the cost of the weaker class, 670
Greeks, ignorant of use of sugar, beer, cultivated strawberry, buckwheat, maize, 275–279; allotments of land by Lycurgus, 138; economic conditions of, gave form to governments, 402
Greece, ownership of land in, 23; family relation in, 61; monetary unit of, 339; earliest money of, 331, 333; government of, 407; alleged bankruptcy of modern, 448; early iron and steel in Homer, Schliemann, Gladstone, and Goldziher, 645; wool culture and sheep in, 668
Gresham's law, 368
Groat, 339
Guesswork, as a basis of proof, 683
Gunpowder, export of, 610; import and revenue, 613
Gypsum, revenue paid by importers, 586

H.

Hair, export, of, 610; import and revenue, 613
Hamburg, 523
Hammered coins, 340
Hand-made goods in India superseded by English machine-made, effects of, 66
Hanover, for free trade in 1818, 514, 515, 522
Hard times, 372, 374–376, 381; increase of imports leading to, 384, 385; of 1854–7, 385
Hardware, wages in, in United States and Europe, 581; effect of imports of hardware from England into India, 66, 67; prices of sanitary hardware in New York, how reduced by American competition under protection, 621, 622

Hatchets, English and American, prices of, 590
Hats, wages in United States and Great Britain, 582; export, 610; imports and revenue, 613
Havre (American) steamer line destroyed, 657
Hay, rakes, export of, 596; export of hay, 610; import and revenue, 613; importer pays duty, 615
Hayti, monetary unit of, 338
Hebrews, taxes among, 453; division and allotment of land, 138; year of jubilee not an example of communism or state ownership, 138
Hemp, under tariff of 1816–1824–1828 in Russia, 527; exports from United States, 610; imports and revenue, 613; compared with wool, 672
Hesse, 515
Hides and skins, export of, 610; import of and revenue from, 613
High duties, England on tobacco, 480; free trade policy lays on tropical and non-competing products, 573
Highways, 430, 432
Hindoos, 486, 516 (see India)
Hinges, English and American prices of, 590
Historical school, 13; not confined to opinion, 17; limitations on, 20; importance of historical method on questions of revenue and protection, 469
Hoard, can not be affirmed of enjoyable wealth, 205; only of reproductive or social, 207; opposite of capital, 211; in stockings, 224; rich have no hoard, 224, 304–307; silver ornaments in India as refuge against famine, 331
Hoes, export of, 596
Holland, government of, 407; credit, 448; American balance of trade against, 599
Home, markets, 381–382; home better secured in Russia than Ireland, 430
Home trade, 512, 560, 567; takes more products than foreign, 602; and is freer as to means of payments, 604
Home production, employs two capitals and two sets of laborers where imported employs one, 572
Hops, revenue paid by foreign producers, 586; export of, 610; imports of and revenue from, 613
Horses, excise duties on, 481
Horse-nails, export of, 596
Hosiery, duties on, in 1828, 383; success of foreign, 691
House tax in England, 482
Hundred rates, 477
Hungary, food exported during famine, 570

I.

Idleness, when compulsory, 511, 513, 569
Identity, not diversity of natural gifts between United States, England, France, Germany, etc., 573
Illinois, land system in, 142; Railroads, aid to, 155; railway earnings and division of, between capital and labor, 173, 311; transportation from, 221; corn, production in, 252; farm products in, 261; tenant farms in, 269; taxes in, 468; manufactures of, 664, 666
Immigration, 145; past and future, 145–146; chart of, 147; money brought by, 148; assorted and exclusion of, 148; exclusion of, as a measure to promote wages, 320, 321; change in consumption by, 321; protection to American industries favorable to, 473; from Switzerland into Ireland during protection, 492; of Chinese into other countries coextensive with destruction of autonomy and industries in their own, 536; figures of Chinese, 548; compared with European, 548; total immigration from 1860 to 1883 shown by tables and chart, 651

Impeachment, 409
Implements, agricultural, in United States, 262–267; Germany, 525; China, 547; wages in manufacture of, in United States and Europe, 581; American articles supplanting those of Birmingham in foreign markets, 596; protected but exported, 610; prehistoric, for defense, 644
Imports, duties on Roman, 454; in United States from 1821 to 1881, average amount of, and revenue produced, 469–472; gold discoveries increase, 470; quantity of imports required under low duties to produce as much revenue as high, 471; chart of imports and revenue from 1820 to 1860, 471; of food, raw materials and manufactures in France, 500; change in Germany from finished products to raw materials, 517; of lumber into United States, 532; increase tenfold of imports of silk into England under free trade in silks, 636; of wool and woolens compared with domestic product, 677–678
Importations, excessive produce commercial crises, 374, 376, 382, 385, 388; importing English iron, is importing English crops condensed into iron, 579; it displaces American crops to the value of the iron imported, 579; importation, where domestic production is adequate, displaces it, but does not increase supply nor lower prices (silks), 635, 636
Importers and foreign manufacturers inspire the free trade criticism, 604, 605; in Jefferson's period wanted duty taken off salt, 640; importers of competing goods, interests not identical with those of American labor, 642
Improvements, 455
Incidence of taxes, 459; a final subtlety of slight practical value, 460; can not be known if "convenience" is consulted, 461–467; of import duties on products amply supplied at home, 609–623; incidence of tariff duties on iron and steel, 647; on wool and woolens, 678–680
India, former wealth of, and present poverty, 66; relative wages in, 315; influence of drain of silver to, over its ratio of value to gold, 346; silver standard, monetary unit of, 338; value in annas, 338; ancient taxes in, 453; land tax or rent, 455; tax on salt, 455; economic effects of British ascendency in, 483–488; revenue paid by, 485; salaries of English and native officers, 485; India was compelled to take free trade in silks and cottons while England kept protection, 487; England vetoes protective legislation in, 533; food exported during famine, 570; England's trade in cotton goods with, 689
India-rubber goods, exports, 610; imports and revenue, 613
Indiana, land system in, 142; fertility in, 242; corn production in, 252; farm products in, 261; tenant farmers in, 269; in silk raising mania of 1826 to 1839, 632; in plate glass, 644; economy of protection to its manufactures against Eastern (Sidgwick), 562, 665, 666
Indians, 23, 49–54, 645
Indirect taxes on luxuries commended by Smith, 461
Individual debts in United States, 448
Industry, incentives to, 62; begins how, 162–166; distinction between it and labor, 163; how stimulated by abundant means of payment, 221; annual product of, in United States, 224; comprehends all economic effort, 290; all new industries unprofitable at first, 318; women in, 325, 328, 382; crises in United States, 382; industries more affected usually by local than general government, 430; failure in, the chief cause of crime, 441; industry a surer source of well-being than charity, 446; effect of

public debt, 448; prohibition of an industry as a means to prevent a tax from protecting it, 461; subversion of industries in India, 485; transfer of industries from Turkey to England, 490; relation of legislation to industry in France, 487–513; in Germany, 514–525; home industry in hemp, flax, linen, and woolen in Russia, 527; relation of government to, 455; Adam Smith on protection to, 555; Mill on protection as a means to naturalize a foreign industry, 556; not an advantage to a country to turn all its energy into one channel, 567; inducements to organize a varied home industry (Moffat), 567; new industries require shelter, Devas on, 568, 577, 578; how protection aids, 609–629; silk industry in England and United States, 631–637; glass industry in United States, 638–644; iron and steel, 644–652; ships and ship building, 652–663; carrying trade, 663; wools and woolens, 664–670; cotton and cotton goods, 670–680

Industrial independence, 671

Industrial war, between England and India, 66–67; between Germany, France, United States, and England in silk manufacture, 631–638; between England and United States in silks, 635–637; in manufactures. 642; Brougham on, 642; in iron and steel, 646–647; England's industrial war against American commercial marine succeeds, 640–666; through "free trade" reciprocity, 655; subsidies, 659; piracy, 663; England scores a short free-trade blow at France, 674; France triumphs under Napoleon, 674; whose views rule Europe, 675

Incomes of people of all nations (Mulhall), 36; in England, 176; growth of, 273; incomes as a basis of taxation, 456; income tax, 479–482; total income of railways reporting in Illinois, 173–311; of English railways, 174; of manufactures in United States, 176–312; of English people compared with Hindoos, 66; in salt manufacture, 312; textile fabrics, 312; iron and steel, 312; meat packing, 312; woolen goods, 312; lumber, leather, 312; ship-building, 313; silk manufacture, 313; tax on incomes called class tax in part in Germany, 522; average income of Hindoos, 486

Inequalities, and crime, 442; in taxation, 463

Inflation, as a cause of crises, 385; produced by war debts, 392, 394; loans to government are inflation, 450

Inquisition in France, 502, 550

Insolvency, of individuals abated by issues of government money, 221; of nations may follow from owing abroad, 377; may be produced by excess of imports, 382; and even of gold, 385; during free trade periods, 377, 385; but not in protective, 389; of nations, 448

Instruments, musical, 519; protected in Victoria, 530; mathematical and musical in United States export of, 610; import of, and revenue from, 613

Interest, pecuniary, the aggregate of all private interests is the public, 36–40; per cent of, lessens as fund increases, 178; ratio of to returns of industry, 178; equal to one half of average rate of profit, 193; ratio of interest to rent, 194; rate of, is in inverse ratio to amount of capital of lender, 222; interest defined, 238; may be high where production is slow, 261; on loans must be added to exports in stating balance of trade of money-lending nations, 395; on United State debt in 1883, 468; interest and wages may both be high if product of industry is great, 579–581

Internal improvements in United States, 150–158, 220; in Canada,

531; in United States Jefferson thought federal government should be empowered to make rather than disturb the tariff on account of a surplus, 640
Internal revenue, or taxes, in Rome and Gaul, 454; in United States, amount of, 468, 475; taxes on whiskey and tobacco popular in United States 475; difficulty of repealing in United States, 475; extent of taxes on internal commerce in England, 482, 483; internal taxes heavy in Turkey, 488; internal trade freer in England than in France prior to 1793, 501; but not between England and Ireland, 501; internal trade most free where protection from foreign trade is best assured, 514; on liquors in United States and in Russia make the manufacturers of liquors collectors of revenue in effect, 527
International competition, 319; payments made by export of debt, 353–359; crisis in one country spreads to others, 377; can be taxed 457, 607, 630; in silks, 633–637; in glass, 644; in iron and steel, 646; in prices of iron and steel, 647; in shipping and ocean carrying trade, 652–664; dispersion of industries among nations better than concentrating them into one, 674, 675
International contempt, shown by eminent English free traders toward their American dupes, 657, 658
International iniquity, 446, 483–487, 488–490, 491–495, 533–548
International taxation, 457; through profits of a conquered and enforced trade in India, Turkey, and Ireland, 483–491; China's struggle to avoid, 540–548; how much Canada pays in, 593, 594, 615–617
International values, 450; and trade, Mill's theory of, 10–14; opposed by Carey, 16
Invasion, to compel "free trade," China, 534; Japan, 553; of silk industry of England and destruction by free trade in silks, 635–637
Inventions, state sphere concerning, 431; inventive spirit crushed by irremovable poverty, 597; most of the great inventions of England made in strongly protected industries and periods, 654, 648, 649, 680, 681, 684, 685; few of moment since 1846, 596, 597; *London Times* on, 596; American invention of pressed glass, 643; in France during protective periods, 674, 675; rapidity of in England in protective periods, 680, 681
Iowa, land system in, 142; cost of transportation from, compared with English farm rents as a tax on farmers, 250, 251; corn production in, 252; value of lands, 257; farm products in, 261; tenant farms, 269; banking in, 352; woolen manufactures in, 666
Ireland, relation of crime to poverty in, 33; population being eliminated, 274–275; home not secured by its local system, 430; effect of prohibition of tobacco raising in, 461, 462; famine of 1846–1849 in, and effect on American exports, 470; taxes in, 476; prohibition of culture of tobacco in, 481; never has had protection to industry from a British parliament, 491; English efforts to suppress manufactures in, 492–495; how it throve under home-rule protective policy from 1783 to 1800, 492; subversion of her industries under Act of Union, 494; free corn in 1846 reduces her acreage to corn one-half, 559; prohibited from producing tobacco in order that duty on may not protect, 562; food exported in famine, 570; our balance of trade with, 599–601
Iron, capacity of one man to produce, 220; division of product in iron and steel manufacture in United States, 312; iron used as

money, 334; rate of exchange of iron for wheat during war, 380; tariff of 1824–28 as to iron and steel, 382, 383; English protection of her iron and steel, 489; in France, 498–503; slow growth of American iron and steel and final high prices under low duties, rapid growth and final low prices under high duties, 500; iron and steel made with less labor cost, though at higher money cost, in Pennsylvania than in England, 511; Hewitt's facts refute Bastiat's sophisms, 511; wages of blacksmiths and iron puddlers in America and Europe in 1867, rates of, 511; quantities of pig and bar made in Germany, 520; iron and steel wages in Germany, 523; galvanized, protected in New South Wales, 530; grates, stoves, etc., protected in Victoria, 530; statutes maintained in England to protect iron and steel manufacture, 555; Michigan would profit (Sidgwick) in producing iron, by protection from Pennsylvania, 565; relative labor cost of producing iron in Pennsylvania, England and France, 573; importing English iron is an importation of the crops, etc., condensed into the iron, and displaces American crops to that amount, 579; wages in rolling mills in United States and Europe, 586; revenue on importation of pig iron, whom paid by, 586; bar iron in part, 587; Mill on division of import duties, 587; wrought iron, English and American prices of, 590; American iron and steel wares pronounced superior by Birmingham board of trade in 1868, *London Times* tells why, 596; export of agricultural implements, values of, 610; exports of iron and steel wares from United States, 610; American iron and steel manufacture and foreign pay duties on, 611, 612, 647; imports of and revenue from, 613; iron and steel manufacture older than agriculture, 644; mythological antiquity of, 645; Schliemann, Homer, Gladstone, and Goldziher on, 645; relation of Vulcan to, 645; small use of iron and steel in Great Britain in 1788, 646; growth of since 1796 in England, 646; better protected in England than in United States from 1790 to 1845, 648; disastrous effects of this fact on American shipping after 1855, 648; world's product of iron, steel, and coal in 1883, 650; total production of iron and steel rails, pig, rolled, prices of steel and iron rails in United States, miles of railroad built, production of pig iron in Great Britain, and immigration from 1860 to 1883, 651; Liverpool Cotton Circular on effects of American tariff, 664

Italian economists, Cossa, 24; Genovesi, 82; Beccaria, 82; Count Rosconi, 336

Italy, monetary unit of, 338; parties in, 404; government, 406, 407; in College of Cardinals, 418; cost of army in, 438; low credit of, 448; tariff of, 530; its balance of trade against the United States, 600; product of iron, steel, and coal, 650; England's trade in cotton goods with, 689

J.

Jamaica, cane-sugar growers seek union with United States or Canada, 505

Japan, unit of, 338; loss of sovereignty as to tariff, 533, 553, 554; averts an armed invasion in 1864 by conforming her tariff to foreign demands, 553; balance of trade against United States, 600

Java, England's trade with, 689

Jeffersonian protectionism, 640

Jenny, spinning, invention and effect of, 681–684

Jewelry, exports of, 610; imports and revenue, 613

Judicial department most coercive on the citizen, 416
Justice, administration of made subordinate to revenue in India, 486

K.

Kansas, silk culture in, 632
Kentucky, glass, 644; hemp, 652
Knights of Labor, relation to the organization of labor, 310; strikes ordered by, 328
Kopeck, 338

L.

Labor, conflicts in defining, 4, 12, 14; bureaus of statistics of, increasing, 22; relation of labor class to price of bread, 26; relative inducements to, in communal and private ownership, 41–54; how supply of affects price, 98; how affected by machine power, 122; in Asiatic countries, 123; relation of to title, 125–130; can not give rise to titles, 129; division of, due to private title, 135–136; modes of division of product with capital, 163; when labor time became a commodity, 166; not the sole producer, 167; dividing product in railways and manufacturing, 172–181; capitalizing the productive value of labor, 181; is not muscular effort, but organized obedience, 182; produces only its own wages, and no surplus, 188; capital the chief laborer in civilized industry, 208; displacement of labor in one country by machinery in another, 209; helpless laborers find work most easily in cities, 219; how affected by large capitals, 219; capacity to produce food, 219; in iron, woolen, and other industries when aided by capital, 220; is freer where capitals are large 227; first organizations despotic, 233; labor on farms, 253–261; value declines directly as distance from consumer of product increases, 259–262; distinction of labor from sport, from services sold to an employer, from crime, from effort put forth to produce, from capital, from implements; is servile effort, 281–284; also distinguished from work, 284; from pleasure, 285; must be irksome and painful, 286; aversion to, 286; necessary contrast between labor and pleasure, 287; less broad than production, 290; is obedience, 290; is only a part of industry, 290; combinations of laborers, 300–303; explosion of wage fund doctrine, 290; profits the true source of wages, 293; population not a check, 295; countries of dear and cheap labor, 297–300; is the ultimate receiver of all wealth, 305; works as even partner with capital on farms, railways, and manufacturing, 309–315; is compensation of, increased by profit-sharing? 314; labor not protected by excluding or lessening population, 321; do wages of social labor increase with their social utility? (Elder) 323; strikes and their cost, 328; woman's labor and wages, 325–328; affected by war and prices, 380; slave labor rises with profits, 384; the wage contract economical to the worker, 433; how effected by spoliation of the capitalist class in India, 485; labor cost, not the same as money cost, 511; of children in Russia, 527; value of, made eight time greater in United States than in China, by adding animal and machine power in production to human, 540–543; quality of Chinese labor, 547; labor troubles which would ensue from the premature introduction of foreign machinery and processes in China, 548; double employment of labor on home products than on imported, 560; laborers protected by tariff duties, 609; no other ultimate destination exists for wealth of

any kind or in any hands except to compensate labor and relieve want, 626; loss of employment in silk manufacture in England under free trade in silks, 635–637; loss of employment in United States in 1816 to 1819 by glut of English goods, 642
Laborers, protected by tariff duties, when, 609
Laces, 383
Laissez faire, the doctrine defined and its decline referred to, 15; Carey assailed, 16; England dropped in practice, 17; its extension to social classes by Prof. Sumner, 21; losses by, 149; how the school of was founded, 199; contrast between the actual English policy and Laissez Faire, 66, 67, 316, 317–431, 432–435; extent of English interference shown by local rates, 477; and by prohibiting tobacco raising, 480–481; interference in foreign countries, 484–488, 489–491; in Ireland, 491–495; doctrine of Laissez Faire ignored and violated in China and Japan, 533–555; even to keep the peace discriminates against those whose occupation would be to break the peace, 578
Lamps, exports of, 610
Land, relation of title to, to tillage of, 125–130; distribution in United States, 139; division and allotment of, in Canaan, 138; Sparta, 138; Rome, 138; mode of surveying, 142; records of, 143; rent and its relation to interest on capital, profits of enterprise, and wages of labor, 171–194; when capital, 210; in cities where land is dearest the poor have the best chance to live, 219; wheat on Dakota land, 219; land of less value than wages to one without capital, 235; title to, begins in possession, 237; always held by highest bidder, 237; how rent arises, according to Mill, Hamilton, Macleod, Fontenay, Jevons, Fawcett, Sidgwick and Price, monopoly theory leads to the confiscation conclusion, 243; large holdings and bonanza farming, 265–274; Large holdings in the United States and England, 270–272; permanent land-holdings promote nobilities, 402; lands and local government, 430; taxes on in China, 455; India, 455; Mill's desire to tax the unearned increment of value, 463; taxes on land-owners, 465–473; revenue from sales of, in United States. 468–474; effect of taxing occupant or owner on rents, 474; when owner pays the land tax, 476; plans for transferring title from owner to tenant, 477; crown lands, 479; land tax in England, 479–482; small value of land where nationalized, 488; land breaking up into small holdings in Germany, 520; land communism in Russia, 526
Land-owners, protected by tariff duties, when, 609
Lard, export, import, and revenue, 610–613
Laurel, 340
Laws, of economics, are natural laws, 2, 3, 4; unity of with physical laws, 4; Mr. Mill's alleged law of equation of international demand is a verbal circle and not an economic law, 13; Laissez faire, an obsolete "law," 15; wage fund theory a verbal circle and not a relation of cause and effect, 16; "profits the leavings of wages" also true only in the physical sense, 17; law of the value of economic facts is identical with the law of weight of physical substances (gravity), 20; moral obligations contract as personal freedom increases, 20, 21; superiority of law over empiricism, 22; how arrived at, 23; relation of hypothesis and experiment to study of economic law, 24; Fawcett's alleged "law" of coincidence of prosperity of laborers and cheapness of bread, 26; law of the bias of statistics

through widely extended interests, 30; of acclimating constitutions to unhealthy influences exploded, 32; of the constancy in ratio of crime to poverty, 32, 33; and to inharmony of races, 34; supposed ratio of prosperity to imports and exports exploded, 35; morals grow with the means to be moral, 48; intellectual rise from barbarism to civilization is identical with an economic transition from ownership in common to private ownership, 53; production springs from exchange, 54; growth in wealth and individual freedom causes growth in corporations and vice versa, 57; within certain limits morality grows with liberty, crime increases with restraint, 59; endurance in the state is proportionate to integrity in the family, 62; family influence as permanent as heredity is natural, 63; with growth in wealth secondary motives (moral qualities) grow, 63; as occupations multiply more, men work at work they love, 64; fighting force of nations is proportionate to their productive power, 65; an important part of a nation's wealth, though not of relative wealth among the citizens, 68; law of equivalence in exchange expresses only a probability, 69, 109; of evanescence of all wealth, 70; of extinction as enjoyable wealth of all that is converted into and remains reproductive wealth, 71; the more social the use the less the perishability of wealth, 72; evanescent in the degree that it is vital, 73; wealth the fruit of abstinence, but great fortunes imply also that it has been reproductively used, 74; the pressure of want a perpetual spur, since the more we get the more we want. 77; Carey's law, that as society advances values decline and utilities increase, discussed, 84; producers create commodities, consumers confer values, 86; demand causes production, 88; economic error produces social insanity. 91; it may ensue from the error that labor causes value, 91; law of declining utility of enjoyable commodities causes exchange, 92, 95; aided by the law of unlimited capacity to feel secondary wants, 93; Gosen's law of pleasure and satiety, 94; law of rise of price in disproportion to scarcity, 95, 96, 97, 115; law of rise of utility as commodity approaches consumer, 98, 99; labor only determines value in the degree that by producing a glut it impairs value, 99; buying futures in grain equalizes prices, 104; price is governed by the profit of future uses, not by cost of past exertion, 110; war only raises prices when it changes the volume of money (Tooke), 113; increase in rapidity of circulation affects prices like increase in volume of money, 114; cost of production is no regulator of price, 114; cheapness in sources of supply will maintain a lower average price than the mere cheapness in the supply itself, 117; the latter may be temporary, former is permanent, 118–120; freedom depends on profits rather than on relative prices of raw materials and finished products, 121; law of survival of poor in cities, 122; of declining values and wages as we go eastward, 122; causes, 123; of destruction of industries by competition, 124; that promises decline in value in proportion to their magnitude and lack of assets for their redemption, 127; individual liberty grows with private titles, 128, 139; and with the number and extent of private monopolies or personal titles as distinguished from communal ownership, 130, 131; and with the evolution of law and the state, 132; laws grow and rights arise as a compromise between usurpation and resistance, 133–

135; private title causes exchange, 137, 138; the state will aid every industry which the majority of the people desire, but in which they can not profitably invest, 151–155: profit the economic cause of wages, 168; as much equivalence in exchange applies to the wage contract as to any sale of commodities, 172; employment at wages tends toward equality of division or working on shares between the aggregate capital and aggregate labor, 176–178; rent tends to take a fourth of the produce of land, interest a fourth, and wages half, 177–180; profits tend constantly to fall to level of rent and interest or to be eliminated, 179–182; rate of profit is directly as the excess and inversely as the time in which it is made, 191; profits average twice the rate of interest, 193; distribution of wealth causes production, 198; wealth means not commodities, but inequality among men in the possession of commodities, 202; the greater the accumulations the greater the diffusion, 204; laboring power is proportionate to and measured by capital, 208; as capital (machinery) grows, labor changes from toiling to knowing, 208, 209, 299, 300; and combines command of implements with obedience to orders, 209; luxury relieves the distant, economy the near, 214; rates of interest decline as accumulations increase, 220–224; money stays longest with those who make it most productive, 217; capital earns a declining rate in any one occupation, but returns to its high rate in some others, 230; man's food increases faster than man, 231; Malthus' alleged law an error, 231, 292, 296; the more the merrier is economic law, 234; whatever impairs the value of capital impairs rates of wages, 235; land is always held by highest bidder, 238–240; rent is the sharing the produce earned with the capital that expels less productive occupations, 242, 249; rent balances transportation, 249–253; and disperses the less competent so that the more competent may have the space, 252; values of land per acre values of land products per capita and values of labor on land all grow as farmers are few, and decline as they are many, relatively to those who do not farm, 256, 265; release of labor by machinery multiplies occupations while lessening toil, 264, 265; with machinery, the less men work the more they get, 266; the bigger the farms the cheaper the wheat, 267–272; large estates make low rents, 272–275; the irksomeness of labor economizes human effort, limiting it to the line in which it satisfies social demand, 286; in the economic sense commodities are produced by *entrepreneurs* and the wage-worker produces only a diversion of the wages to himself, 290; the alleged wage fund law a circuit of words, and not a true law of cause and effect, 291; the wage fund can not cause the wages, since it is the wages in total, 294; profits are the cause and measure of rent, interest, and wages, 294; tendency toward a minimum in old channels offset by a tendency toward the maximum in new channels, 228, 294; difference of average comfort among men much less than difference of wages or income, 298; there is an economy in being slow as well as in being fast, 298; but the fast economy is in the lead, 543, 545; regulating rates of wages implies state employment, 301; trade unions "corner" the labor market on the same plan as brokers corner grain, 301; a combination among many may be destructive of industry, though its aim be one which, if pursued by each one singly, would be promotive of industry, 302; arbitra-

tion cannot determine future rates of wages or prices of commodities, 303, 304; agitations for social revolution exist wherever there is economic incapacity and misconception, 305; money-making is a free art, as to it anarchy in the main already rules, 307, 309; society puts each man in his most useful place, 308, 309; capital and enterprise only can organize destitute laborers, 310; destitute laborers can organize strikes, 310; but they can not organize labor, 310, 328; all wages work is product sharing, at the halves or nearly so, 312, 313; labor markets can not become one market, 315; military protection to foreign trade may protect home wages in an exporting country, 316, 431, 483–495; increasing the diversity of industries in an importing country by protective tariffs also protects wages, 318; there can be no unprotected classes in a protective country, 320; excluding immigration, unless of particular occupations, would not protect wages, 321; trade can only be made free as we are furnished with the means to trade with, 323; woman as a worker tends toward the family order and from the competitive sphere, 327; the sources of the low wages of employed women is the reserve of unemployed, 327; money is the mainspring of industry, 332; coined money of depreciated metal will remain at par partly on the credit which stamps it, 336; a currency chiefly of coin tends toward adulteration, 339–342; relative value of silver to gold seems to depend on relative quantities by weight in which they are produced, the total values of both metals in use being the same, 345–366, 373 (see charts, p. 367); exchangeable credit affects prices as paper or coin, 346, 391, 392; money tends constantly toward idealization, the substitution of faith for value, 349, 355; well sustained national debt will act as money in international trade between the borrowing and creditor countries, 354; cost of credit money is the cost of maintaining the credit, not of engraving the note, 356; fiat money overlooks the true sources of credit, 350, 350; contraction in volume of money enslaves, expansion in good money frees men, 359; an economic illusion may produce substantial effects, 360; good times may attend bad money, 361; gold standard can not be violently established, 362; the world tends toward an equipoise of the two standards as between different countries, if it cannot have the double standard in all, 363; line of fluctuation of prices is made more uniform by the equilibrium of the two money metals, 364, 368; a country gains in both trades by successfully maintaining the double standard, making a profit on the sale of the dearer coin and the purchase of the cheap, always if the parity of the two is restored, 364–365; Gresham's law, that adulterated money causes an export of pure coin, or bad money drives out good, has no application to the case of a fall in the value of the bullion of which one kind of money is made, 368; a run for deposits, being the taking out of one to put into the other, becomes futile if all banks stand together, 370, 371; a resumption of specie payments after a long suspension is an inflation, and tends to a speculative crisis, 371; the maxim, a crisis due in England every ten years, in America every twenty, fails in 1887, 374; freer importation tends to produce a crisis within three years, whether in England, 375–376, 377, 378, 389, 390; or in the United States, 381, 382–385, 386–388; the law, that a country is drained when the balance of trade is against it, admits of no real exceptions, the alleged exceptions

being only failures to get at the true balance sheet, 393–395; monetary and commercial crises are largely due to misgovernment, and the advantages they confer are the adaptation of business to misrule, 397; governments are natural and inevitable, 399–406; the political state takes its form from the occupations of the people, and is military, hereditary, or elective, as occupations are warlike, agricultural, or diversified, 401–429, 432–435; political government by males is co-extensive with the extent to which government is coercive, 435, 436; attractive functions, such as reigning, where a premier governs education and all forms of culture by government superintendence, are non-sexual, 434; do not enforce themselves, 436; difference in the feasibility and economy of laws generally assented to and those enacted by narrow majorities, 436; division of function between the sexes is economic of the welfare of both, 436; saving money by dispensing with armies is a doubtful experiment in the economic aspect, 437–439; all States are army-made, 439; crime an economic problem, 441; over long periods human utilities and mischiefs are more nearly equalized than over short, 445–448; facility in negotiating state loans tends toward socializing state functions, 449–451; a theory of taxation ideally equal in the view of all minds is a chimera, 456, 457; none can follow the final incidence or burden of taxes, 463–465; the productiveness or benefits of tazation is traceable, 465–468; protective tariffs always produce the largest ratio of revenue to importations, 469–472; and stimulate immigration by raising wages, 473; universal suffrage taxes capital, 474; limited suffrage and aristocratic government tax vulgar consumption, 480; facility in raising local loans and laying local taxes favors socialistic expenditure, in England, 478; in United States, 150–155, 474; import duties can only be limited to a revenue function purely by prohibiting the domestic production, 480; hence a country which could produce everything could not lay a purely revenue duty, 562 (preface); a human-labor country can not give free-trade to a machine-labor country without being ruined, 484–496; it must at all cost import the machinery or process instead of the product, 484–496; foreign conquest makes great landlords, 270, 484–486, 520, 521; persistent protection to many industries multiplies land-owners and self-employing small proprietors, 496, 497, 520, 521; true protection begins by protecting raw materials, France, 498; protection a short road to cheapness and abundant supply, 505; France in beet sugar, 20 years, 515–521; United States in cutlery (8 years), 596; if scarcity or dearness is like that produced in spring by sowing seed instead of consuming, it is better in the long run than the transient plenty produced by consuming seed that needs to be sown; Bastiat's scarcity and abundance argument therefore is too simple and single to meet the protectionist argument, 508–510; law of migration of labor and capital, 146, 229, 274, 492–511; protection in proper cases maximizes the return and minimizes the effort to the world at large, 511; production of unlike products not of unlike values creates commerce, 513; hence commerce between countries having equal facilities for producing different products is profitable to both, but that between countries having different facilities for producing the same products is ruinous to one, 513; a country

which exports its raw materials remains poor; it grows rich as it advances to the export of its finished products, 515–521; military energy is proportionate to economic wisdom, 516; national power and unity proportionate to its fidelity to the protection of its own industries and populations, 515–521; The policy of making one country the workshop of the world requires constant aggressions on the rights of barbarian and hand-labor nations, 533–554; free trade in competing products may change the place of production, but has no permanently cheapening effect on prices, 559–560; protection can only raise prices while it is increasing domestic competition which will reduce prices, 563; free trade (the substitution of importation for production) employs one domestic capital where protection employs two, and results in one domestic supply for consumption where protection results in two, 571–574; law, that as wages rise profits fall, is disproved in theory and fact, 579–584; protective duties collect revenue from foreign producers in part, 584; wherever foreign producers can not add duty to their price, but can deduct it from their profits and still leave a profit, they continue to import notwithstanding they pay the duty, 585–594; a wisely laid protective duty never can need repeal, as it repeals itself as fast as it produces cheapness, 596; exports depend on cheapness in their productions, not on willingness to buy of their foreign purchasers, 599, 600; home trade is freer than foreign because it takes pay in more products, 602; matters of public interest are always matters of private interests publicly considered, 603; law of effect of import duty on the price of domestic article, 610–617; can only raise the price where it is forcing a new industry, 617; the law of decline of the tariff tax stated, 618; it bears a like proportion to the portion of the duty paid by foreign producers as the deficit in domestic supply bears to the whole domestic demand, 619–622; the greater the national surplus relatively to a uniform demand the less the value of the aggregate product (cotton), 687; economy of a rise in prices due to a lessened supply, 689; the smaller the quantity obtainable the greater its aggregate value, 690

Lead, German imports and exports of, 519; revenue paid by foreign producers of lead imported into United States, 586; white lead, revenue on, paid by foreign producers, 586; exports of, 610; imports and revenues, 613

Leather, manufacture in United States, division of product in, 312; in France, 498, 499, 503; Germany, 520; Ireland given freer leather than England, 490; revenue on imports into United States, whom paid by? 584; exports of, 610; imports and revenue from, 613; American leather trade, 697, 698

Legislation, influence of private interests upon, 36–38; functions of state in, 136; absence of, against waste of lands, forests, 148; concerning rivers, 149; effects of neglect as to highways, 149–150; by states and Congress as to railways, 150–161; as to rates of wages, 166; restricting banks from issuing notes, 349; act of 1844 concerning issues of notes, 377; suspension of, 377; tariff of 1816–1824–1828, 382, 383; proposal to emancipate, 384; tariff of 1846 and effects, 385–388; in England, how conducted, 411; a check on the executive power, 416; affects the citizen at what points, 417; English habit of legislation by

piecemeal, 478; protective, denied to Indian, 487; act of of union a scheme to destroy Irish manufactures, 492–494; summary of protective laws maintained by Great Britain for 440 years, 555; concerning wool, 669–671
Leicester wools, 672
Liberia, dollar, 338
Lime, export of, 610; import and revenue from, 613; in iron manufacture, 645
Lincolnshire wools, 672
Linseed oil, revenue on, paid by foreign producers, 586
Liquors, taxes on, 475: effect of, on labor in Russia, 227; taxes on, in Russia, 527
Lira and Lire, monetary unit of Italy, 338
Liverpool, customs officials in, 482: growth of, 490
Loans, to the state, inducement to (Adams), 448; a form of inflation, 449; local loans in England, 476; in India, 486; by Germany, 518-520
Local, taxation, 459; government, 429; in United States, 468; in Great Britain, 476; in France, 497; but little craved in Russia except in the commune, 530; effect of local taxation to reduce protection, 694
Locks, door, chest, cupboard and drawer, export of, 596
Locomotives, 519
London, city government of, 405-482; made great by three-cornered trade, 601; decline of silk industry in, 636
Loom, invention of, 484; power loom, 681-685
Lords, House of, 426; how controlled by Commons, 427
Loss, as an economic force, 188-191; proportion of losers to winners, 89; losses to wage-workers and employees by strikes, 310, 328; indirect profits involved in loss, 211; taxes on, 456
Lumber, manufacture of in United States, returns to labor and capital and division of product in, 312; strikes in, 310-328; revenue on imports of, paid by foreign producers, 586; exports of, 611; imports and revenue from, 614-652; Canadian producers bear the tax, 610–618
Lunacy, individual and social, 445-447; may consist in economic error, 91
Luxemburg, 514–521, 650
Luxury, relieves a more distant and precarious laborer than investment, 214; its relation to happiness, 215; taxes on, 456, 461; fallacy of basing taxation on distinction between luxuries and necessaries, 461, 517
Lynn, shoe and boot production in, 697, 698

M.

Macedon, 359, 417
Machinery, displacement of labor in one country by machinery in another, 209; makes capital the laborer and labor only the *knower* in civilized countries, 208; on farms, 219; in iron, woolen, wheat, bread, printing, building, boots and shoes, etc., 220; growth of, in extensive farming, 262–267; aids large holdings and cheap production, 262–275; cast-iron plows, 264; gang plows, 264; harvesters, 265; effects of on labor, 267; does it lessen demand for labor, 297--299; effects in determining wages, 312; absence of machine power in China and economic effects of, 540--553; do machines and animals by exempting man from toil increase his thinking powers in like degree, 542, 543; economic power of United States measured against that of China, 543; effect of premature introduction of machinery by foreigners on native industries of China, 547; wages in manufacture of machinery in United States and Europe, 581, 582; export of sewing, sausage, weighing, washing, mowing and kib-

bling machinery from United States, 596; weighing machinery, exports of, 611
Mail steamers, of America, how lost, 657; of England, France and Germany, how subsidized and sustained, 657–664
Majority, modes of determining, 403; may be of military force, of capital, or of both, 412; close approach of the two, 66; when numbers only count, 414; Calhoun's plan of government by concurring majorities, 414; all majorities reduce to one efficient vote, 421; the rest are inefficient or surplus, 421
Malt, excise duty on, 481
Malthus' law, of population, 230; rate of increase in man and his food, 231
Mahbub, monetary unit of Tripoli, 338
Man, rate of increase of, and his food, 231; his weakness as a savage, 232; requires diversified industries for his culture and happiness, 317,318: Elder on rise in rank of labor according as it fixes itself in things, institutions, or man, 323; growth of value of human life, 445; his secular interests rescue him from suffering brought on by fanaticisms, 446–447; "man is man,"—this (Perry) dispenses with economic facts, 571
Manchester, school of political economists, 15; who oppose its theories, 16; its chief function, 40; trade built up by subversion of Hindoo industry, 486; growth of, simultaneous with that of power spinning, 685, 686
Manufacturers, foreign inspire the free trade criticism,604, 605; of sugar pay the duties on crude sugar, 618
Manufactures, in United States, 147; profits of English, 178; how aided by division of labor, 219; how manufactures affect values of farm lands, wages of farm labor, and prices of farm products, 256–262; profit sharing in, 311, 312; beginnings of, 319; number engaged in, in United States, 320; strikes in, 328; growth of cotton manufacture during war, 380; make a home market for breadstuffs,382; wreck of, under tariff of 1833, 382; same under that of 1846, 382–386; tobacco manufacture heavily protected in England, 481; also rum, slightly, 482; brandy and patent medicines, 482; Hindoo manufactures subverted, 484; by forcing free trade in English goods on India, while England retained protection against Indian goods, 487; same policy pursued by England with Turkey, 488–491; excellence of Turkish manufactures until undermined, 489; decline of since 1812, 490; decline of in Ireland since Act of Union, 491–495; number engaged in, in France, 496; of beet sugar in France and Germany, 503–506; manufactures as a force in emancipating serfs in Russia, 527; effects of premature introduction of steam manufactures by foreign owners in China, 547; skill of Chinese as manufacturers, 552; statutes enacted in aid of manufactures in England for 440 years, 555; manufactures made for all the world not of good quality, 567; foreign manufactures, how driven out of the field at their own cost, 588; foreign manufacturers and producers the exclusive promoters of free trade in United States, 604, 605; of copper, brass, etc., imports, exports, and revenues, 610, 613; list of protected products which are both imported and exported from United States, 610, 613; their relation to the tariff and farmers as stated by Shearman, 611; value of British manufactures, 637; Hamilton's report on glass manufacture, 639; growth of in 1806–15 during non-intercourse, 641; views of Hamilton, Madison, and Jefferson on, 640;

642; quantities and values of glass manufactures in United States, 644; manufacture begins in iron and steel, 644, 645; relative position of, in England and United States in 1740, 652
Marble, exports, imports and revenues from, 613
Mark, 338
Markets, the index of values, 99; defined by Jevons, Cournot, and others, 99–102; leading, of the world, 99–101; grain markets and their effects on prices and production beneficial, 107–120; effect of market prices on production, 114; effect of distance from, on modes of production, 247–262; obstructions between independent labor markets essential to preserve higher prices in one than the other, 315; Andrew Jackson on American markets, 382; taxes on, 455; for English goods, the object of colonization and conquest, 484; in Prussia, 520; distance of markets lowers the quality of manufactures, 567; value of markets depends on past political and collective action of the nation in which they are, 574, 575; hence foreigners have rights in them subject to the national will, 576; Birmingham supplanted in its old markets in iron and steel wares by American, 596; free trade, dividing the home market, causes dearness where the home market must be the chief source of supply, 609; protection secures the whole market and divides payment of the revenue, free trade divides the market and obliges American consumers to pay all the revenue, 612–615
Marriage, statistics of, 30; effect of on woman's work, 326; monogamy, relation to race, food, and economic conditions, 402
Massachusetts, population in 1790, 140; aid to railways, 153; advance in fertility of soil, 252, 254, 328; cultivated land, 546; rates of wages in, and in Great Britain, 582; beginning of silk manufacture in, 632; as a colony protected sheep, wool and wool manufacture, 676
Matches, export of, 610; import and revenue from, 613
Mathematical instruments, export of, 610; import of and revenue, 613
Maximilian, and foreign bondholders in Mexico, 450
Meat, cost of, 25; consumption of in United States, 224; relative shares of capital and labor in first division of product, 312, 520
Mecklenburg, 515
Medicines, patent, British duties on, 482; American export of, 610
Men, in war, 437
Mercantile debt in United States, 448
Merchandise, glut of, may produce inflation, 384
Merchants, qualities essential to success, 400; debts of, in United States, 448; liable to mistake a tax collector for a thief, 453; English merchants in China always backed by English troops, 536
Merino, wools, 672; Napoleon on, 674; in America, high prices on merino sheep, 676
Metals, division of wages in 312; English and American wages in, 582; strikes in, 328; imports of and revenues from, 613
Methods in political economy, 9–36; the metaphysical, 12; the scientific, 23; metaphysical school of, 13, 9–36; bias reflected in economic discussion, 330; on final incidence of taxes, 460; futility of metaphysical aphorisms in the case of a protective tariff producing revenue, 469–472; Perry's dogma "the facts are too many—it's simpler without," 571; how big an inverted pyramid can topple on an "if" in Perry's treatment of the tariff, 589; "reasonable suppositions" substituted for science, 589

Mexico and Mexicans, tribal ownership in ancient, 23; production of precious metals in, 366; United States dependent on for coin from 1790 to 1852, 384; monetary unit of, 338; centralization in, 416; import and export duties, 416; effort of bondholders to seat Maximilian, 450; tariff, 530; cultivation of silk in, 631
Michigan, economic gain, (Sidgwick), by protection against Pennsylvania, 562, 665, 666; wools of, 672; salt production in, and state aid of, 693–697; effect of competition to compel importers to pay duties on imported salt (diagram), 696
Migration of labor owing to lack of employment, 146–148, 274, 275, 492, 494, 511; of profits, 229
Military, strength of protective policy, 515; in Germany and France, 515; military coercion in enacting tariffs of China and Japan, 533; military protection to export trade, 608, 628 (see India, Ireland, Turkey, China, Japan), 675
Milk, export of, 610; import and revenue, 613
Mills, coffee, English and American prices of, 590; number of mills in Canada, 665, 666–668; in cotton, in England, 689
Milled coins, 340
Milreis, 338
Mineral, door-knobs, English and American prices of, 590
Mines, mortality in, in Germany, 32; production of gold and silver in mines of all countries, 366; quantity of coal mined in Germany, 520; taxes on, 454; number employed in, in France, 496; women work in mines in Germany, 525; in United States, 327; natural conditions alone do not insure success in mining, 573; mines probably first paid rent, 645
Ministry, government by responsible, 410
Minority, rights of, 441
Mint of Bombay, ornaments brought to, 331; of United States on coins, 338; of London, 342; rate of coinage in United States, 384
Mir, of Russia, 526–530
Missouri, glass, 644; compromise on slavery, 688
Mohammedanism, opposed to taxing foreigners, 488; large element in British Empire, 516; ascendancy of Mohammedan races in iron and steel manufacture in middle ages, 646
Molasses, 520; export of, from United States, 611; import and revenue, 614
Monarchy, relation of to liberty, 404–405; when absolute, notwithstanding a parliament exists, 406; when advisory and parliament absolute, 406; how the one vote determines majorities, 422
Money, conflict in defining, 6; Lord Liverpool on, opposed by Carey, 16; views of mercantile school on, 18; social uses of, 75; how circulation of, influences prices, 122; brought by immigrants, 148; as a force in abolishing slavery, 164; in prosecuting war, 221; organization of society by money wages supersedes that by rank, 225; money defined, 329–333; by Jevons, Sidgwick, Walker, Hume, Carey, Roscher, Devas, White, 329, 330; meaning varies in different uses, 330; begins as hoarded treasure uncoined, 331; its potency, 333; supersedes not peaceful barter but forcible seizure, 333; oxen used as, 333; its three forms, 335; value of coin not wholly dependent on value of bullion, 336; Count Rosconi on, 336; evolution of British coinage, 339–341; relation of money to prices, 343; proportion of coined to credit money in use, 344; what constitutes the volume of money, 344; ratio of value of silver to gold and how affected, 345; bills and notes, 346–349; deposits and checks,

351; bank-notes, 350–352; national debt as international currency and affecting prices, 353–355; cost of credit money, 355–357; volume of, 358; influence of expanding volume of, 359–361; Hume, Alison, and Walker on, 358–361; how affected in dearness by scarcity, 372; money manufactured rapidly during war, 380; inflation in 1833–37 in United States, causes of, 382–385; sudden dearth of money in 1837, money an implement and not safely exportable from a country except within stringent limits, 383–385; paper money in United States, 384; too many goods in market may cause inflation of paper money and discounts, 334; rapid production of gold, inflating credits and importations may produce crisis, 384; expansion in, 387; relation of government bonds to, 449; cost in money not the same as cost in effort, 511; experience of Russia in suspending and resuming on paper money, 528, 529; money cost and not relative cost in labor or effort may determine a new country's ability to compete with an old in a new industry, 573; Hewett on labor cost of American, English, and French iron, 573; money a greater king than cotton, 688

Mongolia, tribal ownership in, 23

Monometalism, 361–369

Monopoly, and title, 130; and the state, 131; not feared in sparse settlements, 145; Mill holds rent to result from, 242; of opium production by England, tobacco by France, etc., 456; of barbarian trade by military force, 521; effect of, on wages, 623–626; early English laws to prevent monopoly of profits of wool raising, 669

Montreal, Board of Trade and Corn Exchange, secretary's report on Canadian manufactures, 665

Morals, state regulation of, 431; the more exacting the law the more lax its enforcement, 435; no ethical perfection in government, 440; morals and crime, 441; in France, 442; in China, 545, 552; moral value of an extra dollar to the workman on Saturday night, 583

Morrill Tariff, effects of, 469–472

Moslemism, can accept no revenue from foreigners and therefore practices free trade, 488

"Motive" is motive (Perry), 571

Mulberry speculation, 632

Municipal debts in United States, 448

Murders, constancy of, 32, 443

Musical instruments, export of, 610; imports and revenue from, 613

Mutton, exports, imports, and revenue, 610, 613

N.

Nails, export of, 596

Nassau, 513

Nation, profit to, not identical with profits to individuals, 67; national wealth, what is, 68; relative profits of national industries, 36; nationality of immigrants, 148; crisis in one nation affecting another, 377, 385, 389, 391; debts of, 448; of United States, 448; state corporate and private, 448; national unity in Germany a result of protection, 514–525; national policy in Canada allied to protection, 531; national unity in France, Germany, United States, etc., promoted by protection, 628–630; national quality of ships, 654; national apprenticeship in new industries, 569

Nationalization of land, advocated by George, 125–129; in India, 486; destroys values of land and wages of labor, relatively to private ownership, 481–488

Naval stores, export of, 610

Navigation laws, of England, approved by J. S. Mill, 557; Jefferson thought navigation a "protuberant" interest, 598; laws to encourage, in United States, 652

Navy, expense of navy department in United States, 468; of navy in England, 478; compared with the paupers of England, 478, 479; expenditure on, in France, 497
Necessaries, 461
Netherlands, monetary unit of, 338; woolen manufacture in, 669; trade of, for English wool, 669
New England, as affected by free trade with Canada, 574–576
New Jersey, 140, 261; railways in, 154, 264; value of land in, compared with India, 488; proportion of land and tillage to population, 540; glass manufacture in, 639
New South Wales, 530; tariff of, compared with Victoria, 530
New York, railway transportation in, 220; railway consolidation in, 220; infant railways in, 151, 153, 155, 217; freights to, 221; size in 1790, 141; in 1781, 150; effect of canal policy, 150; its statehood, municipal only, in international affairs, 415; cultivation in, 232, 546; land values, 246; fertility, 252, 254; land cultivated in, 546; glass manufacture in, 639; salt production and state tax on, 693–697
New York City, change of rents in, by removal of dry goods trade, 70; markets in, 100; railway freights from Chicago to, 221; Chase and its bankers in 1861, 221; its city government, 405; taxes in, 468; glass, 639, 643; prices of wool in, 679–681
New Zealand, 445
Nihilists, of Russia, not an economic party, and do not represent poverty, 530
"North" the, in the war about slavery, 415, 687, 688
Nobles (half, qr.), 340
Nobility, and land, 402; in England, their part in government, 406
Norway, monetary unit of, 338; American balance of trade against, 600
Notes (see Bills); relation of bank notes to crises, 371–385
Nova Scotia, 667
Nuts and bolts, American superseding foreign in 1868, 596

O.

Obedience, or subordination, is the essence of the wage contract, 184; amount of, required increases as centers of industry become compact, 210; habits of discipline fit one to command, 307; obstructions to equalization of labor, 315, 316; essential in business, 400; disobedience in its relation to crime, 444
Obstacles to production, do not cause production directly, 511
Occupant, relation of occupancy to title, 51–52; to labor, 125–130; to conversion of public land to private, 141; to rent, 243; taxes on occupant of land in England, 459; as to United States, 473; rates paid by, in England, 476; land tax and house duty, 479
Occupations, only a master of an art can teach its theory, 8; not all interested in low prices of food, 26; as society advances occupations become more congenial, 64; tendency of, to collect in one center and make markets, 100; rate of returns in, 100; necessity of capitalists, 227; principles governing the rewards of various, 243, 244; agricultural and manufacturing occupations are the natural markets each for the other, 256–266; new occupations multiply with machinery and capital, 265–266; division of returns in, 312–316; protected, 320; women's, 326–329; strikes in, 328; effect of taxes on, to create a monopoly, 464; forms of government, moulded by, 403; house duty, income from, in England, 479; occupation changing to desolation and desert under free foreign trade and internal taxes in

Turkey, 490; number in all occupations in France, 496; occupations of German women, 524, 525; wages in various occupations in United States, Great Britain, France, Russia, and Prussia, etc., 581, 582; relative wages of women and children in Massachusetts and England, 583
Ocean-sailing craft, growth of, in United States under protection in 1789 to 1816, 652–656; final downfall of, under free competition in carrying, due to vigorous protection to English iron and steel industry and no protection to American, 640, 656; subsidies to English ocean-going vessels, 659, 662, 663; denial of subsidies to American ocean-going vessels, 657–658
Officers, 423, 424; of customs in England and America, 482; native and English officers of army in India, 486
Offices, sale of, taxed in China, 455
Ohio, land system in, 142; railroad aid in, 254; corn production in, 252; farm products in, 261; tenant farms in, 269; manufactures, 664, 666; agricultural report on wheat, 254; woolen manufacturers of, 666; salt production in, 693
Oils, exports of, 610; imports of and revenue from, 613
Olive trees taxed, but imports free, in Turkey, 489
Ontario, manufactures, 667
Opium, forced on China by war, 534
Organizations, of working-men to resist employers, 309–311; cooperation, 311–314; of industry, 432, 433; of home industry, 567; of all opposition to established industries uses same means as protection, 569
Organization, labor, their motive in America since 1873, 597; of society depends on iron and steel, 645, 646
Ornaments, of gold and silver, 33
Ottoman Empire, revenue policy in, 320; monetary unit, 338; economic condition and free trade career of, 488, 491
Over-trading and crises, 377
Oriental and Levant Trading Co., 490
Owner and occupier, which pays taxes, 467, 476
Oysters, exports, imports, and revenue, 610, 613

P.

Paintings and engravings, exports, 610; imports and revenue, 613
Paints, exports of, 610; imports and revenue, 613
Paper, 393; English duties on Irish fourteen times higher than Irish duties on English, 493, 515, 519; protected in New South Wales, 530; wages in paper manufacture in America and Europe, 581; United States revenue on paid by foreign producers, 586; exports of, 610; imports and revenue, 613; American duties on, sustained, 622; who pays, 610–613
Parasols, export of, 611; imports and revenue, 614
Paris, lacemakers of, 214; rents in, 242; city government of, 405; fertility of its pavements, 122
Parish, rates and their use, 476
Parliament, acts of, as to wages, 166; as to bank notes, 349; government by, 406–412; election of members, 418; relations to the ministry, 410; absolute, 426; practical assertions of, 426; mode in which Commons control, 427; protective laws passed by, 555; its inquiries concerning decline of silk industry, how answered, 636–637; early protective measures towards wool and woolens, 669, 670
Partnership, between capital and labor, 163–215; between government and those who as manufacturers of liquors collect the taxe thereon, 528
Parsimony, 218; not always economical, 226; of American government squanders its maritime wealth, 652–664

Party, all government carried on by, 403; majority, how determined, 403; in France, 403
Passenger receipts, excise on, 481
Passion, its sphere in government, 398–399; its relation to crime, 443
Patents to inventors, a form of protection to industry, 675
Paterson, city of, 640
"Pauper labor of Europe," phrase originated with A. Jackson, 643
Paupers, 382; in England, 475; avoided in Russia, 526; schemes of raising silk-worms by labor of, 631, 632
Payment, demand multiplies means of, 221; social workers of higher class can not be paid in a part of the product, 323; money as means of, 329–339; by bills and notes, 345–348; money of account, 348; debt as means of, 393; for public service, 424; national debts as means of, 447–451
Peace, effect of, on industry, 380; in Turkey, 490; effects of peace of 1816 on American manufactures, 641, 642; motto of Cobden Club not sustained by the aggressive tendencies of free trade, 534–555, 630
Penitentiary system, 440–445
Penknives, American superiority in, 596
Pennsylvania, influence of, on German political economy, 514; manufacture of glass, 638, 641; as a colony protected sheep, wool, and woolen manufacture, 676
Penny and Pence, 339, 340
Pens and pencils, imports of and revenue from, 613
People, sense in which they rule, 417
Perfumery, exports of, 610; imports of and revenue, 613
Peru, ancient mode of ownership, 23; diamond hunters of, 214; monetary unit of, 338; recent reverses of, 440; subservience to bondholders, 450
Peseta, 338
Peso, dollar of South America, 338
Petroleum lamps, Americans superior in, 596
Philadelphia, city government, 405
Phœnicia, 453, 455
Piaster, monetary unit of Egypt and Turkey, 338; standard coin of Tripoli, 338
Pickaxes, English and American prices of, 590
Pickles, etc., imports, exports, and revenue from, 613
Pig iron, duties on, paid by manufacturers, 611; in England, 646; in United States, 647; relative prices in both countries, 647; who pays duties on, 647; colonial export of, encouraged by England, 647; protective policy of Great Britain contrasted with low duties in America from 1800 to 1846, 648; effects of, 649; world's production in 1883, 650; production of in United States from 1860 to 1883, 651
Piracy, directed by statesmanship and aided by American subserviency, scores a net gain by the destruction of American carrying trade, 663
Pitch, 520
Pittsburg, glass manufacture in, 639, 640, 643
Planes, English and American prices of, 590
Plated ware, export, import, and revenue, 610, 613
Pleasure and Pain, economics treated as a theory of, 94
Plows, American inventions in, 264; labor saving, 264; superiority of American in foreign markets, 596
Plumbers' brass ware, American export of, 596; prices reduced by tariff, 621, 622
Plural voting, on local taxes, 478–479
Plutology, 7
Poland, partition of, less injurious than free foreign trade in Turkey, 490
Police, of China, 537
Political economy, defined, 1–9; causes of its declining influence, 9; conflicts in, 1–9; influence of

Carey and American school on, 16; relation of to ethics and jurisprudence, 18; mercantile school, 18; relation of, to ethics, 22; practical, where studied, 36–40; of the wages question, 287–303
Politics, of India, 66; of United States, 66; of German socialism, 91, 301; of internal improvement as advocated by American statesmen, 150; of American railways, 150–160; in France, 403; Russia and China, 404; England, 411; in United States, 418–429; of Indian empire, 483–488; of the Irish question, 494–499; of Germany, 524; of Russia, 526; of British colonies, 530–533; ignorance of western nations concerning politics and economics of China, 548; of Democratic party in United States in 1854 to 1858 concerning free foreign trade and slave home labor, 553; protectionist claim that the domestic production of an article employs more domestic labor than its importation, not fairly met by Jevons, 560
Poll tax, 453, 463; of China, 545
Poor, state care of, 431; cost of in England, 478; what the poor most need to sustain wages, 625
Population, Malthus on, 16; feebler and more perishable class may endure in cities, 121; increase of, in colonies, 140; predictions of, in United States, 145; future, 145; chart of, 146; increase of, with wages, 169; inefficient, delinquent, and incompetent survive most easily in cities, 219; earth's capacity for, 229; Malthus' law, 230; means of subsistence increase faster than, 234; relation of, to rent, 237–241; views of Smith, Ricardo, Carey, Bastiat, Mill, Roscher, Locke, and Fontenay on rent and population, 238–242; ratio of capital to, fixes the wages fund, according to Cairnes, 290; alleged tendency of, to increase with rise of rewards of labor, 292; is population a check on wages? 295; diminishing population has no economic tendency to increase wages, 320, 321; fluctuating population increases crime, 442; moves toward protective taxation, 473; of England in 1882, 479; under the sway of Great Britain, 483; increase of, in Ireland under protection, 492; proportion in towns in France, 497; under the Zollverein and in modern Germany, 515; of British Empire, how distributed, 516; of China would be reduced and scattered by a disruption of Chinese industries by substitution of English, 536; of China as indicated by size of army, 537; exaggerations concerning populations easily exposed, 538–541; opinions of Malte Brun, Sir G. Staunton, R. M. Martin, J. R. McCulloch, De Guignes, John Francis Davis, Dr. Medhurst, Dr. Morrison, S. Wells Williams, Marco Polo, Adam Smith, Behm and Wagner, Minister Seward, and S. Aug. Mitchell, concerning Chinese population, 538–550; probable actual population of China, 547; ignorance of western nations concerning population of China, 548; population, may be attracted by protection, 566; of Great Britain and America in 1788, 646; moves from free trade to protection, witness American ships and English farmers, silk weavers and wool growers, 682
Porcelain, tax on manufacture of, 455; in France, 502, 503
Pork, revenue on, paid by importers, 586; exports, imports, and revenue, 610, 613
Porter, duty on and export of, 610; import of and revenue from, 613
Porto Rico, trade with, 600
Portugal, ornaments of the people, 331; monetary unit, 338; alleged bankruptcy of, 448, 516;

English treaties with, 500; balance of trade with, 600; woolen industry ruined by tariff treaty, 670
Post office, revenue from, 480; British post office on the cost of sending ocean mails, 657, 658; American post office, 664
"Post hoc ergo propter hoc," 703–706
Postage, subordinate to subsidies in English, French and German ocean mail service, 657–664; supreme in American non-service and dis-service, 658
Potato, revenue on imports of, into United States paid by importers, 585, 586, 591; imports and exports of, and revenue from, 610, 613
Potato rot, in Ireland, causes of, 491
Potash, protected in United States, but exported, 610
Pottery, effect of import of from England into India, 66, 67
Pound sterling, 338; variously called sovereign, double angel, unite, broad, and guinea, 340–341
Poverty, relation of to crime, 33, 42; abolition of, would be wealth, 75; caused by war in France, 70; function of, as spur to service, 77, 78, 89; how affected by monopoly, 130; essential to existence of wealth, 201; is the true opposite of capital, 211; rarity of extreme, 216; consistent with happiness, 216; the poor survive best in compact populations, 219; is greatest in countries of least capital and fewest monopolies, 227; poorer countries use a currency of silver, 339; periods of poverty and distress, and causes, 382–386; throughout United States in a free-trade period relieved by soup-houses, 386; poverty not a feature of the depression of 1873 to 1879; influence of poverty of the whole or a class in shaping government, 402; what the poor pick up in streets of Paris, 122; poverty and crime, 441; salt, tax on in India, 455; cost of poor in England, 478; poverty of Hindoo people, 486; of Germany under free trade prior to 1827, 515; suffering poverty prevented in Russia largely, 526; relieved within the family in China, 552; the extra dollar removes, 583; unfavorable to invention, if excessive, 597; during cotton famine in England, 690
Powder, gun, exports, 610; imports and revenue, 613
Power, love of, as a motive in government, 455; cotton as a power in politics, 688
Power loom, invention and effect, 681, 685
Predictions, fallacious and sound, 373, 374
Premier, 453
President, of United States, powers of, 417; mode of election designed by the Constitution, 418; how it was ignored and disused, 419; effect of such departure the convention system and direct vote, 420, 421; evils and anomalies incident to it, 421, 422; the few who select are not the constitutional few who were intended to select, 423
Prices, law of rise in, by diminished production, 95; Jevons, Thornton, Tooke, Chalmers, Carey, and agricultural reports on, 96; relation of, to value and utility, 94–100; markets determine, 94–114; freedom necessary to fair, 102; as made in grain and stock markets more economical than privately made, 108, 109; not regulated by cost of production, 110; but by dividing advantage, 111; exaggerated statements attributing high prices to protection which were due to wars and affected all prices and all countries, 112; chart of prices of grain and flour in England, France, and America, 112, 124; Tooke on effect of scarcity on prices, 113–117; effect of war on, 113; seasons, 113; rapidity of circulation, 114; Carey on prices and freedom, 121; countries of high and low prices, 122; of land

in United States, 145; are conditions of production, 167–181; affected ultimately by cost, 220; by war, 221; by nearness of consumers, especially of bulky products, 252–263; prices for labor must be higher where greater freedom is to be maintained, 315; of coins, 340; affected by volume of money, 343; relation of to crises, 371–375; of provisions, 372; effects of war on, 380; and of prices on prosperity, 380; chart of prices from 1790 to 1880, 380–381; prices follow volume of currency, 387; chart of prices and circulation from 1834 to 1864, 387; falling prices cause cessation of production and hard times, 390–393; stimulated by government loans, 449; of sugar in Paris under Napoleon, 503; low prices of beet sugar in 1884, 506; prices of Canadian exports to United States, how affected by tariff, 532; breadstuffs not reduced in price by repeal of corn duties in England, 558; protective duties, if wisely laid, never need repeal in interest of prices, 563; their effect on price repeals itself through home competition, 563, 564; made more even under protection, 570; cheap goods mean cheap human labor, unless they are the product of machinery, 583, 584; price not affected by the duty where the domestic production is adequate to supply the domestic demand, 585, 586, 615; duty cannot in many cases be added to the price, and in all such cases it comes out of the profits of producer, 587, 588; example in cutlery, 587; of English and American iron and steel wares in 1882, of steel rails, fall in, 590; law of the ratio of whole supply to the whole demand applied to the effect of tariff on prices, 591, 592, 593; repeal of revenue duties on coffee in United States did not produce equivalent fall in, 600; on breadstuffs in United States not affected by duty; prices during silk and moris multicaulis mania in United States, 632; of pig, and iron and steel rails in United States from 1860 to 1883, 651; extraordinary price of fine woolens in ancient Rome, 669; high price on merino wools and sheep in United States, 676; why the duty on wool does not raise its price by amount of duty, and under a sufficiently ample production not at all, 678–680; of foreign and domestic wools compared, to show that duty is not added to American price (see chart of prices), 679, 680, 681; effect of abundant production on (cotton), 687; economy of a rise in prices due to a lessened supply, 689; in cotton famine of 1861–5, 689–691; of quinine before and since the supersedure of American by foreign manufacture, 692

Priesthood, power of socially, reflected in state, 413

Primogeniture, 144

Printing, wages in England and America, 582

Printing presses, export of, 610

Private purposes, defined, 702, 703

Problems, can abundance promote ultimate poverty, and scarcity ultimate gain? see Tooke on, 116; of national debts, 447–451

Producers, when protected without rise in prices, 609

Production, as related to trade, 6; cost of production as a cause of value, 11; social and moral effect of, 41–54; decreased affects prices by what law, 95; cost of does not regulate price (Tooke), 114; but past and present price determines how much cost can be expended in future, 115; scarcity sometimes has effects like those of, 116; domestic production and money cost, 124; and monopoly, 130; how affected by distribution of land, 140; no production of forests, 148; begins with appropriation, 162–166; depends on capital, 167;

and on prices, 169; and on subordination of wills and obedience, 182–188; which, and not muscular effort, is the essence of labor, 182–188; laborer produces only his wages, 187; involves opposing distributions of wealth and of products, 196; reproductive wealth only the subject of avarice, 206; humanity of large accumulations of means of, 205–210; on bonanza farms, 219; cost of wheat production, 219; of bread, 220; of iron, 220; by small capital, 222; annual, in United States, 224, 229; capacity of the earth for, 230; rate of production of man and his food, 231; productivity of capitals applied is wholly distinct fact from fertility of soils, 238; production implies subordination, and is a government of interest, 307–309; but is a partnership affair in the division of the product, 309–315; on a small scale can seldom begin in free competition with production on a large scale, 319; by women, 325–328; rate of production may increase during war, 380; but diminishes with falling prices, 390–393; steered into new channels by crises, 395; which minimize the pain of failure by making it general, 396; mental qualities which promote success in, 400; are war and army expenditure productive? 438–440; share of product taken by taxes in ancient Rome, Gaul, China, 454, 455; production of commodities and values are inverse, 465; of beet sugar in France in 1875, 505; large production of iron and steel in America the shortest road to low prices, 509; cost of production includes import duties, if no other than the dutied market exists, 532; production doubled by protection as compared with importation, 560; production should not be sacrificed to revenue, 563; productiveness of protective tariffs as respects revenue, 469–472; production at lower labor cost may be at higher money cost, 574; of glass in United States from 1790 to date, 642–644; per capita of woolen goods in United States, 683; of iron, steel, railways, etc., in United States, 651; of pig iron, steel, and coal in world, 650; of ships and steamers as affected by subsidies, and by protection to iron and steel, 651–664; of cotton and woolen goods in Canada, 668; of sheep, wool, and woolens in all countries, 668–683; tariffs do but little to regulate the quantity produced, but much to determine the place of production (quinine), 692; production of shoes in factories in United States, 697; domestic production, how aided by tariff, 609–629; of silk and silk goods, history of, 631–637; of glass, 636–644; of iron and steel, 644–652; tables and chart of iron and steel production in United States and Great Britain from 1860 to 1883, 652–653; protection the prevailing policy of Europe since Napoleon and Frederick, 675

Profit, sometimes greatest on small crop, 116–119; in railways, 155; the inducement to employ labor is, 168–194; risk earns it, 186; rate depends on time as well as price, 191–194; charity is a subtle form of, 204; of peace, 211; small capitals earn large rates of, 222; causes of high, 229; do not decline in the new fields, 229–230; defined, 238; is there an ordinary rate of, 238; profit-sharing in farming, 268–272; profits the mother of wages, 293–316; rate of, the measure of success of industry, 293; the source of wages, rent and interest, 294; steer industry and energize labor, 294; views of Smith, Walker, Cairnes, Atkinson; what qualities favor profit-making and aid the worker to become an employer, 307; how all industry is profit-shar-

ing, 311--315; is intended profit-sharing better than the involuntary? 314; profit of sustaining bi-metallism, 365; if successful, 365; great public improvements that yield no profit may produce financial crises, 379; declining profits stagnate labor and produce suffering, 390; rate of profit measures the social necessity of industries, 397; in the economic sense, 397; desire of profit controls all social organization and reciprocal usefulness among men, 400; relative prospect of, in loans to government and investments in production, 449; making a profit out of being taxed, 463; profits of trade may be a form of taxation, 483--491; salaries and bribes as profits of conquest, 480; mercantile profits of Indian trade, 486; Englishmen's profits the basis of the act of union, 493; profits small in Germany, 516; sometimes lessened by necessity of paying duties on the product, 532; profit of working under protection is offset by losses of initiating a new industry, so as to equalize the chance of profit in protected industry with that in business of other kinds, 565; Sidgwick on, 565; the profit argument for free trade applied to protection, 576; American industry always less profitable than it might be, so long as it exports raw cotton, breadstuffs and provisions, instead of first working them up into finished cotton goods (Jefferson), 598; profits during moris multicaulis mania in United States, 632; profit of growing cotton dates from cotton gin, 686; affects the profit of growing slaves, 687; profits of cotton manufacture, rule English politics, profits of growing cotton did for 40 years rule American, 688; wages are paid no longer than profits exist, 690

Prohibition, of imports of calicoes, chintzes and muslins by England in 1700, 489; between Holland and France in 1671, 501; of new vineyards in France, 502; of imports of iron and steel wares into United States from 1790 would have brought cheapness and abundance, 650; great political and social economy of, 650; applied to foreign vessels from taking part in coasting trade, 652

Proletariat, small in France relative to employers, 496

Property, effect of land becoming, 138; according to Adam Smith, 288; social uses of private, 304; as a qualification for voting and holding office in England, 479; and income tax, amount of in England, 479; in land in India, 488; in New Jersey and New York, 488

Protection to industry, 17, 121--124; distinction between importing competing products and competing producers, 314; the former displace labor without increasing demand, 314; the latter adds to the demand as fast as to the supply, 315; protection to industry in United States involves an obstruction to equalizing American labor market with foreign, 315; military protection to foreign trade, 316; natural protection, 319; exists as to all non-importable products and services, 319; protected classes, 320; it protects prices of raw materials to export only finished products, 322; tariff of 1824--8, 382; natural and artificial facilities, 382; rate of duties under, 383; overwhelmed by excessive importations, 384; failure of a government to be loyal to its own people in industrial matters may cause crises, 307; power to levy tariffs essential to national unity, 416; protectiveness of a nation's policy involves study of local as well as general, and army and colonial as well

as tariff action, 431; may be military, 431; early traces of it among Hindoos, 453; protection or the prohibition of an industry the only alternatives if the country can produce the article, 461,462; those who do not live by industry are not so directly interested in, 463; protective tariffs excel free trade tariffs in producing revenue, 469--472; and also prosperity, 473; protection to tobacco manufacturers in Great Britain, 480--481; to extent of prohibiting imports into England of calicoes, chintzes, and muslins, 489; advance of Ireland under, from 1783 to 1800, 492; not responsible for retaliatory tariffs, 500; aims to produce in harmony with natural facilities and at less labor cost, 511; List's, labors in behalf of, in Germany, 514; division between German states in 1818, 514; effect of, on relative military strength of France and Germany, 515; limit and extent of German opportunity in Zollverein, 517; applies to raw materials as much as to finished products, 517; in Russia, 525–530; in Australia, Austro-Hungary, Italy, Servia, Roumania, Spain, Mexico, and South American States, 530; Canada, 531--533; protection in India vetoed, 533; absolutely crushed out in Chinese tariffs, 538; and Japanese, 553; vast number, variety, and vigor of protective statutes in England, 555; principle of protection indorsed in part by Smith, Mill, Sidgwick, Devas, etc., 555–558; doctrine on policy of, ascribed by Rogers to Tories, 557; by Price to practical men in Germany, France, United States, and Canada, 557, 664; Perry regards profanity as essential to a scientific elucidation of protection, 550; Jevons does not meet the protectionist argument that domestic production employs two home capitals, importation one, 560; protection cannot require more wisdom than destruction, 561; duty can only be protective while it is adding another industry, 563; same duty may give revenue on part and protect against part, 565; attracts population and increases national strength (Sidgwick), 566; is natural, 567; Moffat on, 566–568; Devas's arguments for, 569–571; justified by Roscher, 569; tends to avert famines, 570; protection doctrine requires low or no duties on all products which we lack natural facilities to produce, 573; it puts all duties on products that compete with what we produce, 573; Hewitt on our natural facilities for making iron, 573; free trade not desirable between Canada and Vermont, 572–575; Perry's point, "trade profits, or men would not trade," 576; trade in the long run and the short run, 578; rates of wages in America and Europe, 579–582; Wendell Phillips on the dollar, 583; taxes that enrich the consumer because paid by the producer, 585–589; Perry's vast superstructure of tax wabbles on an "if," and falls, 589, 590; steel rails not "taxed" by the tariff, but reduced in price four-fifths, 589, 651; woolen blankets not "taxed," 590–679 (chart of wool prices); iron and steel wares not "taxed," 590, 647, 650; protection to the profits of its own producers is that which each nation means even when it, by sacrificing its farmers to its manufacturers, calls it free trade, 606–608; the five points of protection, 609; protection promotes unity and peace, 628–630; relation of, to silk manufacture in United States, 631–634; decline of silk manufacture in England since protection was withdrawn, 634–638; introduction of glass, china, carpets and tapestry manufacture into

France by Colbert, 639; early protection to glass manufacture in the United States, 640; induced by Hamilton's report on, 639; partly protected by friability, 643; greater tariff protection to British than to American iron and steel manufacture from 1790 to 1845, 648; disastrous effect of failure to protect iron and steel manufacture felt for ensuing fifty years on American shipbuilding, 649; American navigation laws exclude foreign vessels from coasting trade, but after 1816 fail to protect American ocean-going vessels in any way; 653; protection by discriminating duties and tonnage acts from 1789 to 1816, 653; growth of American shipping under, 653–654; repealed by treaty, 654; and acts of Congress, 654; since 1862, 654; positive effects of protective policy on growth of American merchant marine, 656; results of, in Canada, 664–668; history of protective legislation in England as to wool, 669–671; Lord Bacon a prophet of protection, 670,671; multiplicity of the modes of protection to industry, 675; Thos. H. Benton favored a progressive duty on wool, 676
Protected classes, 320, 328
Protected industries, strikes among, 328
Provisions, export of, and rate of duty on import, 610; revenue, 614
Prussia, rates of wages in 1867, 511, 581; proposer of protection in Germany, 514, 515, 517; miles of railway in, 520; advance of wages in under protection since 1879, 523; rates of wages in 1869, 581
Public purposes, defined, 702, 703
Publishing, wages, England and America, 582
Puddlers, iron, wages in United States, Great Britain, Prussia, etc., 511
Pumps, export of American, 596
Punishment, involves economic loss, 441; modes of, 444; severity lessened, 444; colonization, 445
Pyramids, and iron, 645

Q.

Qualities, in implements the best is cheapest whatever it may cost, 596; of wool, 672
Quantity, as quantity of certain exports increases value declines, 673
Quebec, manufactures, 667
Quicksilver, exports of and duty on imports, 611
Quinine, destruction of manufacture in United States, by free trade, 690–695

R.

Race, of immigrants to United States, 145; first to use iron, 645
Rails, iron and steel, production and fall of prices, 651
Railway, travel, safety of, in United States, France, etc., 29; railways and monopoly, 135; American, growth of, 150–161; Harlem, 151; in England, 151; Baltimore and Ohio, 151; Mohawk & Hudson River, 153; Boston & Albany, etc., 153; era of consolidation, 155; land grants to, 157; areas of, 158; distribution of earnings between capital and labor, 172–174; shrinkage of values, in 1883–5, 190; cost of moving grain and flour in America, 220; how controlled by Vanderbilt, 220; reducing freights, 220; rates of in United States, from 1868 to 1884, 221; shrinkage in values borne entirely by capital, 222; profit-sharing in railways, 311; strikes on, 328; insolvency of American railways in 1857 produces crisis in England, 377; excessive building of railways, 379; expectations of, in 1837, 385; relations of to iron and steel industry, 391; debts of, in United States, 448; effect of on imports, 470; loans in India, 486; mileage of, in Prussia, 520;

aid to railways in Canada, 531; effect of premature introduction of railways by foreigners in China, 547, 551; freights on American railways, 584; miles of railroad built, tons of iron and steel rails made in United States, and prices of rails from 1860 to 1883, 652, 653
Rank, organization of labor by rank, 225; effect of rank and grade of life on crime in men and women, 442; taxed in China, 455; depends indirectly on iron and steel manufacture, 646
Rates, incidence of, 459, 467; kinds of, 477
Raw materials, prices of, 121; in estimating wages, 172–176; values given to, by diversifying industries, 322; distinction between raw materials and finished product, applies to each product singly, but disappears in national aggregates, 671; France protects, 498; valueless in India where manufactures were destroyed, 488; Germany remained poor and weak, while the "granary of Europe," 515; production of, first protected under Zollverein, 517; raw materials may be dearer and yet the finished product cheaper, 596; so of American iron and steel wares, 596; demand for raw silk in England falls by three-fourths under free trade in silks, 636; small raw materials required for iron and steel manufacture in England in 1790, 646; wool a finished product, 671
Reciprocity, treaty of United States with England in 1816 described by Mr. Huskisson as a dexterous swap for England, 655
Record, debts of, in the United States, 448
Refiners of sugar, duties, 618
Rent, Ricardo's theory opposed by Carey, 16; causes of, 125–150; share of produce of land that goes to rent, 177; according to Smith, Young, rates of on productive real estate, 179; how compares with profit on capital, 193; relation of rent to value of land, 237, 238; Smith's and Ricardo's views criticised, 239; depends wholly on location, 239, 240; views of Carey, Roscher, Bastiat, Locke, Mill, Fontenay, and MacLeod on, 242; defined as cost of occupying working space, 238; depends on what facts? 238; rent balances transportation, 247–251; economizes productive space to the advantage of society, 248–253; revenues rented in Asia and Africa, 453; taxes are rent where government is socialistic, 453; or simple bondage, 453; the first rent would be of mines (iron) for manufacture of weapons, 645
Repeal, of a protective duty can never be needed, 564, 596; of duties on coffee in United States raised prices in Brazil, 600
Reproductive, capital distinguished from enjoyable, 163, 205, 207; reproductive wealth defined, 216; rate of reproduction in man and his food, 231; investments in reproductive wealth, if premature, produce crises, 378
Republic, 131; diversity of form in, 415; departments of in United States, 427; freedom to vote for its officers does not lessen their absolute powers, 416
Residences, regulation of by government, 435
Responsible government, defined, 406; history of, 406–412; dates in England from failure of George III. to subdue America, 409; developed largely in Victoria's reign, 410; crown represents the dignity, cabinet the policy, 454
Resumption, in England in 1820, effects of, 370, 371; in Russia, 528; and United States, 390, 392, 528
Revenue, farming the, 453; as an exclusive object in laying taxes belongs to the military period, 456; sources of, in the United States, 468; most revenue always produced by protective

tariffs, 469–473; from public lands, internal revenue, and customs in the United States, 475; in England, from all sources, 479, 476; cost of collecting in England and United States, 482; drawn in salaries in India, 485; from land in India, 488; of Turkey mortgaged, 490; of France, 495–498; of Germany and Prussia, 522; of Russia, 527; collected in the United States on Canadian products not a tax on consumers, 533; of China, 537; tariff for revenue only is an impossible chimera, 561–563; duties on imports will protect unless domestic producduction is forbidden, 562; Amercan government having no power to prohibit domestic production, 562; can not levy a duty for revenue only, 562, 563; a tariff for revenue only calls for high duties on products we have no natural facilities to produce, 573; revenue derived from importation of articles of which we produce our whole supply, 586; duties so far as they produce revenue are revenue duties (Mill) 587; even repeal of revenue duties may not always cause reduction in prices by amount of duty (coffee), 600; portion of revenue collected from foreigners, 623; revenue from silks, 634

Revolution, agitation for a social, 304–307; tendencies to paternal despotism where spirit of revolution is deficient, 402; effected in English government by American independence, 409; what is deemed revolutionary in England, 426; loss of life in French revolution compared, 447; kind of industrial revolution needed in China, 551–554

Revolvers, American superiority in foreign trade, 596

Rhode Island, 141, 252; population of, to cultivated land, 546

Rial, 340

Ribbons, England protects her own against Irish, 493; decline of, when protection against French and German gone, 634–637

Rice, excise on, 481; revenue on, in United States, paid by foreigners, 586; exports of, 611

Rice-hullers, American export of, 596

Roads, taxed, 454

Romans, economic conditions of, determined their political institutions, 402; power first in soldiers and priesthood, then in soldiers and lawyers, then in political manipulators of elections, etc., 402; register of revenues and expenses, 454; tribute derived by, 454; wool culture and sheep among ancient, 668

Rome, pope of, 404; elective, 405; mode of choosing, 418

Rome, ownership in, 23; family relation under Roman law, 60; classes which ruled in, 402, 405; extraordinary prices of fine woolens, 669

Rose noble, 340

Rotation of crops, 255, 520; and of manures, 520

Rouble, 338

Roumania, tariff, 530

Rubber (see India rubber)

Rupee, 338

Ryots, 485, 486

Russia, markets of, 100; bureaucratic government, 406; value of agricultural products of, 230; relative wages in, 315; ornaments worn in, 331; monetary unit of, 338; political parties in, 404; local government, 430; the *mir*, 430; expenditure on army in, 438; alleged low credit of, 448; area of, 526; communal and land system of, 525–527; emancipation, 526, 527; home industry in, 527; child labor and total number of hands employed in factories of, 527; Russians escape three important forms of western taxation, through their more practical socialism as an aspect of their intenser despotism, 529; the taxes of emancipation (including rebellion), resumption, and pauperage, 529;

American balance of trade against, 599–601; product of iron, steel, and coal in, 650

S.

Salaries, as a mode of taxation, 485
Salt, earnings of salt manufacture in United States and division between capital and wages, 312; value given by meat packing, 322; tax on, converts the Hindoos into earthworms, 487; Roman taxes on, 454; Chinese, 455; heaviest known tax laid on in India, 455, 486; United States revenue from, not paid by consumer, 586; fuller demonstration of this point, 693–697; exports of, 611; imports and revenue from, 614; a surplus of revenue not a good reason for withdrawing protection from, 640; salt production in United States as related to tariff, 693–697; foreign production as compared with domestic in use, 693; 693; prices, duties, and manufacture South and North, 694, 695; from 1868 to 1872 duty was added to price, from 1872 to 1876 it was divided, since 1876 it has been paid entirely by importers (diagram), 696.
Sausage machines, American export of, 596
Savages, absence of money among, 331; schemes of converting by raising silkworms, 631
Savings banks in United States, 190
Savings, taxes on, 464
"Saw gin," Whitney's, 686
Saws, wages in manufacture of, 581; English and American prices of, 590
Saxe-Weimar, 515
Saxony, wages in 1867, 511, 515; wools of, 672
Scales and balances, exports, 611
Scarcity, effect of on prices, 115–119; of savage life, 162–166; of crime during great wars, 443; the scarcity and abundance sophism of Bastiat, 508
Schools of political economy, 9–36; of Carey, 16; schools sustained by taxes under universal suffrage, 474; in Prussia, 523
Science, is political economy a, 1–9; classification of, by A. Comte, 6; the scientific method in political economy, 23; how economy made exact (Jevons), 34; Perry says the facts are too numerous, whirling and entangled, 571
Scissors, American export of superior, 596
Scotland, union of with England, 340, 461; taxes in, 476; prohibition of culture of tobacco in, 480; lessened product of breadstuffs under free trade in corn, 559; production of tobacco prohibited in order that import duty may not protect, 562; our balance of trade with, 599–601; early protection to glass, 639
Seasons, effect of bad seasons to destroy agriculture counteracted by protection to corn in England, 113–118
Secession, war for in United States, could it have been averted? 438
Seed, tax, 466; export of (hay and cotton) seeds, 611; import of flax, hemp, etc., 614
Senate of United States, 414, 426
Servia, government parliamentary and responsible, 407
Sewing machines, American export of, 596, 611
Sex, in crime in Great Britain, 33; imposes no material obstacle to directon of industry if the value sense exists, 307–308; women as wages-workers, 325–328; does their best welfare lie in giving them a broader claim to support at the hands of male relatives, or a freer admission to compete for wages? 325; limitations on woman as a worker, 326; degree in which they are self-supporting in United States, adherence to the family order, 327; the workers find their real underbidders in the "ladies," who work or not as they choose, and

hence help to fix woman's work nearer the gratuitous standard, 328; sex and crime, 441, 442; in work in France, 497; in Germany, 524; in strikes, 328
Shearing frames, 681, 685
Shears, cast steel, English and American prices of, 590
Sheep, taxed in Turkey, but imports and aliens free, 488; in France, 498; antiquity of sheep culture and history of, 668–683; development of, 671; may be bred to any pattern, 671; high prices on merinos in America, 676; growth of sheep and yield of wool in United States, 677
Sheetings, 383, 666
Shillings, 339, 341
Ships, building and repairing of in United States, low returns to capital and large to labor in, 313; English ships needed protection until they could carry cheaper than all others (Mill), 557; wages in, in America and Europe, 581; American ships came under free competition in 1816, 642; shipbuilding dependent on iron and steel manufacture since 1845, 648; British ships protected by discriminating duties on iron carried in them, 648; canvas and cordage for, 652; rapid growth of shipping while under protection in United States, 653, 654, 656; national quality of ships and right to protection, 654; free ships would put an end to ship-building, 655; decline of American ocean-going marine because unprotected itself and dependent on iron and steel manufactures, also unprotected, 656; while English iron and steel industries were got ready for ship-building by persistent protection, 640; subsidies to English ocean-going vessels, 659, 662, 663; denial of subsidies to American ocean-going vessels, 657, 658; American penny-wise meanness toward ships enables England to score a handsome net profit on her piracy over all costs of indemnity, 663
Shoddy and rags, in Yorkshire, 122; in English blankets, 590, 672
Shoemakers' tools, American export of, 596; productions of in United States, 697
Shoes, export of from New England, 35; law governing price of in exchange with corn, 97; strikes in, 328; protected in 1824, 383; women's shoes exported from United States, for one hundred years past; magnitude, value, and cheapness of New England shoe trade, 697, 698
Shovels, English and American prices of, 590
Siberia, tribal ownership in, 23
Sidon, 453
Silesia, wools of, 672
Silk, early culture of, in America, 631; visionary economic views concerning, 631; colonial export of raw, 631; revival of in 1826, and silkworm mania, 632, 633; manufacture of, in United States, sharing of product in, 313; English silks protected against Irish by Act of Union, 493; taxes on manufacture of, in China, 455; decline of silk manufacture in Turkey, 491
Silks, French imports and exports of, 26; Belgium, 26; manufacturers of Bengal petition for same protection against English silks as England exacts against theirs, 487; former repute of Turkish silks and velvets, 490; in France, 500–503; statutes in aid of silk manufacture in England, 555; wages in silk hats in America and Europe, 581; English silks protected against Irish by Act of Union, 493; decline of the tariff tax on silk though the duty remains the same, 620, 621; manufacture of in America, growth of value of product, 633; a consequence of protective duties, 633; decline of manufacture in England under free trade, 632; proportion of silk manufac-

ture to Great Britain's entire manufacture (McCulloch), 637; McCulloch's attempt to "explain away" the destruction of the English silk manufacture by free trade, 637, 638; imports of into United States from France and Germany, 637; former rivalry between England and France in, 637; scarf of silk in Cœur de Leon's contest with Saladin, 646; fibre of compared with wool, 672

Silver, in India, 331; the money of the poor, the retailer, the laborer, and of vital consumption, 339; in England, 399; relative quantity used, 344; has free coinage, and is standard in India, 362; in Germany, 363; effect of cessation of drain to India accurately foretold by Meggins prior to 1770, and verified in 1873, 373; export of, where it subtracts from circulating medium, 383, 384; American interest in Chinese trade, 536

Simplicity, as a cover for indolence, 571

Skill, influence of on wages, 312

Slaughtering and meat packing in United States, relative wages and profits, 312

Slavery, associated with tribal ownership, 23; and pauperism, 30; relative prosperity of free and slave states partly due to race capacity, 33; in United States by census, 146; slavery abolished by substitution of wages for force, 164; servants, provision for, 166; change of opinion concerning slavery with growth of freedom, 233; relation of to free trade and the secession movement of 1832-33, 678-679; rise in price of slaves due to success of cotton, 384; in civilization is succeeded by penitentiaries, 444; slave labor and free trade parts of the same scheme of propagandism in United States, 553, 687; profits of cotton-growing and slave-growing combine to make slavery a power, 687; the slavery struggle in America an economic war, 688

Smiths, 383, 511, 646

Smuggling, between England and France exceeded legitimate trade in 1774, 500; right to smuggle in China and Japan backed by British forces, 554; in New York it is effected by agents of foreign houses (Wells and committee of Congress), 605

Soap, England protected her soap-makers, but gave the Irish free soap by Act of Union, 493; export of, 611; import of and revenue from, 614

Socialism, theory of tribal or communal ownership should be studied, how, 23; state socialism and wherein all state life is social, 57, 60; what is social wealth, 63–65; social view of title, 125–150; Henry George's scheme of land, 125, 130; disappears as to title with advances of society, but increases as to use, 130–151; culminates in slavery, 138; socialistic tendencies of taxation, 145; aid to railways and reaction against, 145–161; railway theories of socialism, 160; argument of, as to capital, labor, and wages, exploitation and robbery, stated and answered, 167–185; Mill's quasi-socialism, 185; the socialist objection to accumulation answered, 198–210; Karl Marx, 209; social saving by private enterprise, 218; poor survive best in cities, 219; social gain by large capitals, 220; social use of reproductive wealth, 224; Bastiat on socialism, 234; objections of socialists to large landholding, 272; socialist views of labor discussed, 304–320; destruction of values by strikes, 310, 328; doctrine that returns to capital are a robbery of labor is subversive of all social order, and tends only to destroy industry, 307; wages of social labor, 323; tendencies of local government to socialist undertakings, 477–479; socialism of the Russian *mir* and *artel*,

526; in Russian finance, 528; Russian socialism in two aspects exceeds that of western nations, 529
Sociology, relation of to political economy, 7
Soil, exhaustion of, 253-256; relation of protective policy to, 570, 571; would first be used for making iron, 645
Sol, monetary unit of Peru, 338
Soldiers, erroneous statistics of in France under Napoleon III., 30; health of British soldiers serving abroad, 31; of recruits in France, 32; bounty laws in America, 145; wages of, 290; hold the power at first, 402; cost and functions of, 437–440; relation of to industry, 440; soldiers for sale in Germany while export raw materials, 515; expenditure on soldiers in France, 497
Sophisms, of Mill as to protective duties producing no revenue, 469–472; may apply to a theory, but not to a practice, hence to free trade but not to protection, 507; of Bastiat criticised, 506–513; of Perry as to paying for foreign products with domestic and trading for profit, 571–577, 578
Southern States, effect of war of 1861–5, 415, 687, 688; in salt making, 694
South Carolina, in 1828 to 1837, 384, 629, 630; silk raising, 631
Southdown wools, 672
Sovereigns, 340–342; pound sterling, 340
Sovereignty of United States within its powers, 415; sovereignties merged in Germany, 522; of China and Japan undermined as to tariff, 533, 534
Spain, 214; monetary unit of, 338; government responsible, 407; debt of, 448; order destroying vines and olive trees in Mexico, 480; tariff of, 530; American balance of trade against, 600; product of iron, steel, and coal, 650; wool and woolens, 668, 669; wools of, 672
Sparta, causes of its peculiar state life were economic, 402; aristocratic, 405
Specie, import and export of, 383; turned, 384, 386; resumption of, 529
Specific duty on tobacco, converted into ad valorem, 481; nearly all duties specific under Zollverein, 517; on glass in United States, 644
Spinning jenny, 681, 684; spinning frame or throstle, 684
Spirits, 480, 481, 482; export of, 611; import and revenue, 614
Spirituous liquors, annual value of, consumed in United States, 25; taxes on, 463, 464; effects of, 475; how methylated for use in arts, 476; English revenue from, 480, 481, 482
Spiritual government, 428
St. Petersburg, 351, 405
Stamps, revenue from, 479, 482; in India, 486
Standard, silver, and later gold in England, 334; coin, 335, 336; in United States, 336; nine meanings, 342; single and double, on, 361; Beaconsfield on, 362
Starch, Act of Union gave Ireland free starch, England protected starch, 493; export of from United States, 611; import and revenue, 614
State, control of railways by, 29; origin and functions, 131–151; aid to railways in United States, 150–161; decline of cost (value) and increase of utility of the state as society advances (Elder), 324; state, like the family or the basic qualities of human nature, is a necessity, and natural, 392, 393; the government of interest known as industry or business is more searching, minute, and controlling than the political state, 399; it is an unconscious government, 400; form of the state determined by the material conditions of the people, 402–404; state as a mechanism much alike in its essence and

form, whatever its mode of selection, 404–415; parliamentary and representative states, 406; responsible ministry and dissoluble legislature, 407–412; Roman state, 412; what forces state must represent, 413; "concurring majorities" according to Calhoun, 414; relation of industrial to political, 431; the state as wise as its average constituency only, 441; objects in punishment, 440; state debts in United States, 448; loans to, 448; effect on tax policies of state becoming a producer, 456; subjects of a state do not pay all its taxes, 457; state taxation in United States, 468; functions of in England shown by diversity of local rates, 477–479; state aid to railways in Canada, 531; state aid to silk culture in United States, 631–633; state aid to glass-making in Massachusetts, 639; state is the sum of all intrinsically profitless but socially necessary industries, 700, 701; and hence merges into identity with protection, 700, 701

Statesmanship, its relation to political economy, 8, 17; American examples of, 38; state defined, 131; statesmen assume the basic qualities of human nature as constant factors, 398; forms through which it works in England, America, France, etc., 406–429; class who supply work for statesmen, 447; statesmen should know whether a tax produces revenue and prosperity, 465–469, 469–473; as this is a practical matter, but need not know its final incidence, which is a metaphysical subtlety, 459–460; statesmanship of Russia in emancipation, 527; of Germany, 514–523; of colonial and Canadian independence, 531; Chinese statesmanship as to subversion of native industry by foreign processes prematurely introduced, 548; American statesmen overreached and out maneuvered by English from 1815 to 1860 in matters relating to carrying trade and ocean ships, 640–664; destruction of American merchant marine an intended steppingstone to disunion, 657, 658; of Sir John A. Macdonald, 664; of Colbert in France, 673, 674; artisans, how attracted, 674; blunder of French statesmanship in 1786, 674; triumph of Napoleon's protective policy in Europe, 674,675; statesmanship of America holds protection to be the surest road to cheapness, 683; of Great Britain sacrifices domestic production to foreign trade, 689

Statistics, definition of, 24; philosophy of, 24–40; Cossa's fallacy as to, 24; what they show, 24; fallacious handling of, 24–26; conflicts of, as between different nations, 26–28; may be due not to error but to different classification, 27; as to silks, coal, wool, hops, glass, 28; of china discredited, 29; military under Napoleon III., 30; of the poor prove relief only and not poverty, 30; of eccentric marriage, 30; of health and climate, 31; crime, 32, 443, 444; taken with a bias, 33; accurate predictions of population, 145; of grain production, shortage and effect of in United States, 1879–1883,106,117;Mongredien's errors concerning causes of dear breadstuffs in England, 112; during Napoleon wars, 112–113; chart showing that fluctuations in America and France were identical with those in England, 124; of repeal of corn laws, 119; of immigration into America, 141–150; chart of, 147; of forests in United States, 148; of beginning of railways, 152–157; land grants, 157, 158; of division of product between capital and labor, and of division of capital fund between rent, interest, profits, 173–182; of economy of large capitals, 219–230; of relative capacity

of reproduction as between man and his food, 230–234; of ratio of rent to value, 244; of rent and transportation as balancing, 250–252; of diminution in value of products by distance from markets, tax of transportation, 252; exhaustion of soils and contra, 254; of ratio of farm incomes, farm values, and farm wages to nearness of consumers (Dodge), 256–262; of agriculture by machinery, 263–267; of large landholders in America and England, 268–274; of depopulation and waste of Ireland, 274–275; of emergence of food plants into general use, 275–280; of cost and economy of strikes and lockouts, 310, 328; of division between capital fund and wage fund in America, 311–314; of women who labor, 325–328; of value of standard coins, 338; of fineness of British coins, 340–342; of all coins and paper in use, 344; of export of bonds, 340; of turning from silver to gold in Germany, 362; of rate of production of gold and silver, 363–367; causes of disparity between silver and gold, 368; of crises, 1825–6 in England, 371; 1847 in England, 374; 1857 in England, 377; of 1816–19 in United States, 381; of 1837 in United States, 382–385; of 1857 in United States, 385–388; of 1866 in England, 389; of 1873 in United States, 390–392; of balance of trade doctrine, 393, 394; of balance of trade, how marred, 395; of cost of armies, 437; of crime, 440; of income and expenditure of United States in 1883, 45; of average imports and ratio of revenue to imports under protection and low duties from 1821 to 1861, 469–470; of taxation in Great Britain, 476, 479; of paupers in England, 478; of cost of collecting revenue, 482; of spoliation of India, 484–488; of Turkey, 488–491; spoliation and decline of Ireland, 491–495; of occupations of French, 496; of women in France, 497; of revenues, 498; of French taxes, 499; of population of the Zollverein, 516; of German revenues and prosperity, 492–524; of sources of revenue, 523; of iron and steel production, 522; of emancipation in Russia, 527; of resumption of specie payments in Russia, 528; concerning China always begin in a guess, 537; of Chinese population as estimated by most competent geographers, 538–550; of Chinese immigration to America, 548; of rates of duty and of duties paid by foreign producers under American tariff, 607–620; of steel rails, cutlery, plumbing ware, paper, and crockery trades, 620–626; of experiments in silk culture in America, 631; American manufacture of silk, 633; of silk manufacture in England, 634–637; of progress of iron industry in Great Britain, 646; of the world's iron, steel, and coal production in 1881–1883, 650; of American iron and steel products, steel rails, railroad building, and immigration from 1860 to 1883, 651; of English and American shipping and their rivalry in ocean carrying trade, 652–664; of manufactures in Canada, 664, 668; of sheep and wool and prices, 666–684; of cotton and cotton goods manufacture in United States and England, 684–691; of quinine, 692; of American and foreign salt, 693–697

Statutes, of England protective and prohibitory, 555; protective of iron, steel, and shipping, 648; American less so, 648; English protection of wool, 669

Steel (see Iron), acts to protect manufacture of, in England, 555; wages earned in iron and steel in United States, 312; German, 523; wages in steel works United States and Europe, 581; were the duties on steel rails a tax on con-

sumers or a relief to railways? 589, 651; English and American prices of iron and steel wares in 1882, 590; antiquity of, 645; world's product of steel in 1883, 650

Steel rails, effect of American production on prices, 590; other causes than tariff operated to delay fall in prices, 618, 619; production and prices in United States from 1860 to 1883, 651

Stock, exchanges, a more perfect form of market, 101; shrinkage of railway stocks, 222; live stock, absence of in Chinese empire and its economic effects, 540–547

Stone, wages of working in, in England and Massachusetts, 582; age of stone, 645

Stoneware, exports of, 610; imports of and revenue from, 613

Strikes, relation of to commercial crises, 190; waste of, 310, 328; not wholly cured by profit sharing, 314; number of, from 1881 to 1886, men and establishments engaged, and gain and loss by, 328; English strikes and riots of the machine breakers, 684

Subsidy, protection by, efficiently applied to English vessels, 656–660; while denied to American, 656–659; liberality of British government, 662; mode of paying, 662; economy of subsidies, 663, 675

Suez canal, favors absenteeism in India, 487

Suffrage, influence of extended, 402; expanding the right of, 418; effect of extension of, on the spirit and intent of legislation, 424; why only males vote, 435; effect of universal, on modes of taxation, 474

Sugar, revenue from (1861) in England, 480; repeal of import duty, 480; excise, 481; revenue from, in France, 498, 503; History of development of beet sugar in Europe, 503–506; efforts to prove a country richer for not producing it, though it can produce it cheaper than any others but not at first, 504; France obtained abundant and cheap beet sugar in 1840, 505; German export of, 520; cultivation of, partly extinguished by forced importations in Japan, 554; wages in refineries in United States and Europe, 581; cane growers in Jamaica seek to get into a protected market, 505; since 1860 France taxes beet sugar heavier than colonial, 505; export of, 611; import and revenue, 614; state of American market and prices relatively to European, 618; necessity of making all the sugar a nation consumes, 629

Supply and demand, economics a study of, 4; law of applied to prices as affected by duty, 591–594; law of ratio of whole supply to whole demand applied to determine effect of import duties on prices where there is a competing domestic production, 618; when supply is short prices rise in disproportion to scarcity, 690; of cotton in cotton famine, 690; prices diminish chiefly with the magnitude of supply (shoes), 697, 698

Surplus, of revenue in United States under protection, 384; division of, among the States, 384; how it arises (1883), 468; existence of, not a good reason for withdrawing protection from salt (Jefferson), 640; the greater the national surplus relatively to a uniform demand the less its aggregate value (woolens), 673; compare Tooke, Carey and Baird, 113, 117; (illustrated in case of raw cotton), 687

Sweden, monetary unit of, 338; wages of blacksmiths and iron puddlers in, 511; American balance of trade against, 600; product of iron, steel, and coal in, 650

Switzerland, monetary unit of, 338; economic conditions favor democracy, 402; wages in, in 1867, 511

T.

Table-ware, American export of, 596
Tallow, United States revenue on, not paid by consumer, 586; export of, 611; import and revenue, 614
Tanning bark, protection on, and export of, 610
Tapestry, introduced in France, 639
Tar, 520
Tariff, when it becomes necessary as a protective agent, 319; of 1824–28 in United States, 382; compromise tariff of 1833, 384; how it brought on the inflation of 1834–36 and crisis of 1837, 385; tariffs in United States from 1820 to 1881 compared as to productiveness of revenue, imports, and immigration, 468–472; importance of making, 488; Turkish tariff on English steel 3 per cent., English tariff on Turkish steel $150 per ton; how English and Irish tariffs contrast under Act of Union, 493; England takes protection and dear goods and gives Ireland free trade and cheap goods, 493; sample of specific duties in Zollverein, 517; tariff of Russia designed for protection chiefly, 527; essential uniformity in all tariffs, 530; except where sovereignties are coerced, 533, 534; Chinese and Japanese tariffs, obtained by American and English coercion, 534, 553; tariff of France, protective duties in, 498; discussed by Smith, 500; retaliatory tariffs, 500; tariff for revenue only an impossible thing in the United States, 561–563; Sidgwick on, 561–566; need of protection increases with means of transportation, 569; rate of tariff required to sustain production in lines where equivalent effort produces, 585; tariff not a tax when the production it causes lowers prices more than the duty raised them (steel rails), 589, 651; tariff not a tax on consumers when paid by importing producers, 612–615; when price is raised but there is a competing domestic production, 618–620; change of revenue tariff on silks to protective, 633; effects of, 633; tariff as to silk from 1790 to date, 634; Jefferson regarded tariff and patriotism as identical even where the revenue was in excess of needs, 640; of 1824 on glass, and effect of, 643; British tariff on iron and steel from 1790 to 1849 created the British mercantile marine of 1850 to1888, 648–650; American free trade tariffs on iron and steel for same period destroyed our ocean carrying trade, 648–650; discriminating duties according to bottoms in aid of ships, 653; effect of protective tariff in other countries on England, 664; principles on which wool and woolen duties were based in United States, 677; caused a great increase in production of woolens and wools and a gradual lowering in price through abundant supply, 674, 678; Bigelow and Hayes on, 678; on quinine, 691, 692
Tartary, economic conditions favor nomadic life, 402
Tasmania, 445
Tax-payers, relieved to the extent of revenue collected from foreigners, 585; amount of relief, 586, 612, 616, 617
Taxation, the state the proper judge of the purposes to which it is adequate, 431; earliest taxation was tribute, 453; rapine by, 453; is rent where government runs industry, 453; taxes in services, 453; and representation, 453; objects of, 455; theories of equality in, 456; on property, 456; on expenditure, 456; on superfluities, 456; despotism of single-taxism, 457; vagueness and self-contradiction in Dr. Smith's theories of, 457–460; elusiveness of taxes and dif-

fusion of their effects, 462–468; self-imposed taxation, 466; taxation by profits of trade with conquered barbarians, 483, 490; in France, 496–504; in Germany and Prussia, 522; tax on human energy in creating the means of reproducing wealth in western nations, 549; degree in which burden of domestic taxation is borne by domestic producers, 556; taxation for revenue (without either protecting or destroying industry) an impossible chimera, 561, 562, 563; all production caused by some form of taxation, 584; Perry's error, 584; tariff duties in part relieve domestic tax-payers wholly from taxation, 585; by collecting revenues from foreign producers, 586; duty on import does not effect a tax on consumer unless it raises price, 589, 612–614; nor if deductions in price exceed rise, 590; the "tax" of protection an exploded myth, 683

Taxes, effect of, on statistics, 29; as a means of confiscating land by numbers, 125–130; none on land in Great Britain, 144; in America, 144; socialistic, 145; transportation as a tax on production, 250–253; the chief tax on producers of farm products, 320; Elder on greater freedom in taxation as society advances, 324; of United States in 1861–5, 353; paid freely where money is made plenty, 353; modes of voting in early England, 408, 409; tribute the earliest form of, 452; mention of, on Egyptian monuments, 453; in Roman Empire, Asia, Carthage, Gaul, 454; mode of distributing under Constantine, 455; in Eastern Empire and China, 455; enormous rate of, on salt in India, 455; the seed tax is the source of all production, 466; what taxes are most lightly felt, 467, 468; state and local taxes in, 468; on liquors and tobacco an imperceptible check on consumption, 475; amount of local and national taxes in Great Britain, 476; taxes in profits of foreign trade, 484; ratio of taxes to income in India, 486; taxes become a ground rent, 486; foreigners and resident aliens exempt from in Turkey, 488; on beet sugar in France, 505; in Germany, 522, 523; on liquors brings government into partnership with the traffic in Russia, 527; distribution of, in Russia, 529; exemption of Russia from certain heavy forms of taxation, 529; effect of proposal tax according to population, or to give alms, on census, 539; taxes in Japan, 554; the tax effected by a protective duty (if it effects one) repeals itself, 564; taxes may be thrown on foreign producers, (Sidgwick), 566; tariff not a tax when the production it causes reduces prices by five times the entire duty (steel rails), 589; all internal taxes reduce the protective effect of tariff, 694

Tea, on free list in United States, 573, 600; early discriminating duties on, to favor American ships, 653

Terms, elusiveness of economic terms, 14

Texas, area compared with Germany, 315; salt beds and temporary protection under a free trade confederacy in salt making, 694

Textile fabrics, aggregate returns to labor and capital in, 312; are refused protection in India while protected in England, 487; Liverpool Cotton Circular on American tariff, 664; causes of prices, 691

Thistle crowns, 340

"Throstle," invention of, 681–685

Tillage, perfection of in Germany, 520; more women than men employed in, in Wurtemburg, 525

Timber, exports of, 611; imports and revenue, 614

Time required by free trade to pro-

duce financial crises—four years in United States, 382; one year in England, 374, 376; seven years in United States when delayed by unprecedented influx of gold, 385; four to eight years in 1816 to 1824 to extend to all branches, 642; thirty-six years of free carrying trade sustained by United States before the free trade principle proved fatal, 656

Time required by protection to produce cheapness—beet sugar in France, twenty years, 515–521; cutlery in United States, eight years, 596; general manufactures in Germany, twenty-five years, 514–517; to build up American manufactures to prosperity, fifteen years, 641; British woolens, twenty-five years, 669; export of wool prohibited 165 years, 670; to convert wool into a coat, one day, 671; under reduction of duty (2 cents per pound of wool) to reduce whole number of American sheep one-seventh, two years, 679; to reduce American quinine manufacture one-half, five years, 672

Tin wares, export of, 611; import and revenue from, 614

Tithes, Hebrew, 453; India, 453; paid by natives in Turkey, aliens pay nothing, 488

Title, private, as related to labor and production, 125, 130, 134; regulation of, by government, 430

Tobacco, duty on, in England, how prevented from protecting the cultivation of, 461, 462; Shadwell and McCulloch on, 480–481; revenue from, 480; comes from United States, 480; invoice price in United States of tobacco shipped to England, 481; revenue from monopoly of, in France, 498; statutes to protect manufacture of, in England, 555; English duty on American tobacco according to Adam Smith justifies American duty on any English product, 556; export of, 611; imports and revenue from, 614

Tolls, 454, 476

Tonnage acts, for American vessels, 653; repealed by treaties, 654; dues, different on English and American vessels in American ports, 655; tonnage in foreign and American vessels, 656

Tons, gross and net, 650

Tooke, on prices, 113–117

Trade, its relation to commerce, 6; essay on balance of, by G. King, 95; boards of, for grain and provisions, economy of, 102–120; engaged in, in United States, 320; Great Britain derives no revenue but profits of trade from outlying dominions, 484; domestic trade increased by protection in a degree greater than foreign trade is checked, 512; trade arises not from production of unequal values of the same product, but of like values of unlike products, 513, hence England's superiority in the same line paralyzes, 513; freedom of internal trade as essential as protection from exterior competition, to the American policy, 514; a large trade makes a low price, 623; internal trade between North and South the most permanent and cordial basis of political union, 649, 650; three-cornered commerce, 664; in slaves between the slave-growing and cotton-growing States in 1815–1830, 677–679

Traders, home traders protected when, without raising prices, foreign competing article is excluded, 609

Trades unions, 166, 309–315; proportion of strikes ordered by, 328

Transit duties, 455

Transporters, protected when, 609

Transportation, and rent, 249; Mill's theory of annihilation of rent by perfect transportation, 247–253; as a tax on farmers, 320; strikes in, 328; relation of State to, 455; taxes on, in China, 455; number of persons in, in

France, 496; greater the development of transportation the greater the need of protective tariffs, 569; reduction in cost of, a mode of protection, 675
Traps, American export of rat, beaver, and fox, 596
Travel, 520
Treason, industrial, a general strike would be (Jevons), 302
Treaty, tariffs by, of England with Turkey, 488; Portugal, 500, 670; Ireland, 494; of 1816 between Great Britain and United States, 514; of England with Japan, China, etc., 516, 533; held irrevocable by England, 554; with United States, 642; concerning shipping, 642; extended to other countries, 653; of 1815, 655; Huskisson on the profits of the reciprocity swap, 655; of England with France in 1786 in woolens, 674
Tribe, and tribal ownership by, effects of, 23, 49–54, 130
Tribute, of India, 486
Tripoli, 338
Troy, ancient, Schliemann on iron in, 645
Trunks, export of, 611
Tunis, French bondholders in, 450
Turkey (Ottoman Empire), revenue policy of, 320; ornaments worn in, 331; monetary unit of, 338; gave England free trade, 170 years in advance of England's repeal of the corn laws, 488; protective England sapping the wealth of free-trade Turkey, from 1675 to 1842, 488–491; former wealth of, in manufactures, 489; present desolation, 490, 516; the only thoroughly free trade country in Europe, 490; England's trade in cotton goods with Turkey, 689
Tyre, 450; Tyrian dyes, 669

U.

Umbrellas, exports of, 611
Union, economic effects of Act of Union in Ireland, 492, 493; how it was bought and paid for, 493; free trade to Ireland and protection to England were the basis of the Act of Union, 492, 493, 494; union of the states hinges upon maintaining protective policy, 628–630; the proslavery struggle, of 1820 to 1865, 687, 688
Unite, coin of James I. 340
United States of America, drink bill of, 25; travel in, 28; free and slave States in, 33; homicides in; 34; secondary importance of foreign trade in continental as compared with insular states, 35; field for study of economics the best, 36; income of, 36; export of shoes from New England, 35; the best economic teacher, 38; value of its census, 39; growth of population, 140; area of, 141; system of land registration, 143; population, 145, 146; future population, 145; displacement of labor in by machinery, 209; annual product of industry in, 224; wages in colonial period low, 227; value of agricultural product, 234; its standard of wages, 315; its debt-paying policy, 352–355; crises in, 381–385; coinage in from 1851 to 1856, 386; responsible government not developed as a system for discussion or adoption when constitution of United States was modeled, 407, 409; government of United States defined, 415; as respects foreign nations each State forms a municipal subdivision of one nationality, 415; cost of maintaining its government in 1861–1865, 437–439; various forms of debt in United States and amount, 448; state systems of taxation in, 456-468; national, 468; relative revenues in protective and free-trade periods, 469–471; how affected by English duty on tobacco, 480; number of custom officials and cost of collecting duties, 482; wages of iron puddlers and blacksmiths in, and in Europe,

511; origin of federal union in United States and Germany, 514; effects of wars of 1806 to 1815 and peace of 1816, 514; United States leads in certain ways, 521; resumption of specie payments in United States compared to that in Russia, 529; subordinate position of United States in trade with China, 536; silver interests of, 536; has no constitutional power to pass a tariff for revenue only, 562; unity of the country involves loyalty by the government to those who have paid the cost of maintaining it, 575; relative wages in United States and Europe, 581; railway freight, 584; no longer supplied by Birmingham, 596; motive in establishing American Union was chiefly protection, 628–630; first culture of silk in, 631; Jefferson believed protection should be continued, nothwithstanding it made a surplus, 640; quantities and values of glass manufacture, 643, 644; population compared with Great Britain, 646; less vigorous than England in protecting iron and steel manufacture from 1790 to 1845, 647, 648; disastrous effects of American free-trade negligence on ship building, 648–650; product (1883) of iron, steel, and coal, 650; percentage of world's production, 650; United States built up a carrying trade and merchant marine by protection, 652–656; and lost it by bowing the knee to the free-trade Baal under name of "reciprocity," 655; influence tariffs of British commerce from identity of interests merely, 664; production and importation of wool, 672, 674; diagram of, 679; the struggle over slavery, 687, 688; England's trade in cotton good. with, 689; imports and exports of cotton goods by, 696

United States of Colombia (see Colombia)

Unity of law, between economics and physics, 4; of states, 416; and of essential form and operation underlying the state mechanism, however differently selected, 416; of Germany, 514–524; in a nation resembles that in a family, 575

Universities, 480

Uruguay, America buys from, England sells to, 600

Utility, relation of to value, 6, 96–100; Jevons on fluctuations in, according to change in wants, 95; how affected by supply, 99; of accumulations, 220; increase of utilities with progress of man, 232; utility of private ownership as against state ownership, 304; of the qualities which promote success and profit in employing labor, 308; is labor paid for in proportion to the degree in which its utility is social? 323; increasing utility of the state as society advances, 324; of ornaments among barbarians, 331; of money, 344

V.

Valises, exports, 611

Values, Mill's theory of international values, 10–14; relation of to utility, 6; when depend on cost of production according to Mill, 10; vanishing values, 69–71; definition of, 79; by Adam Smith, Carey, 79; by Roscher, Marx, Bastiat, Cairnes, F. A. Walker, Cherbuliez, Jevons, Perry, La Vasseur, Locke, McCulloch, Ricardo, Carey, MacLeod, Aristotle, Condillac, Whately, Say, Beccaria, 79–84; fallacy of resting value on labor, 84; how all labor passes into commodities, 85; comes from the consumer, 86; Karl Marx's theory of, 88–91; begins with Smith and Ricardo's error, and carries it out logically to thuggism, 91; Jevons's theory of, 94; based on Gossen's theory of pleasure and pain, 94; values are determined in markets, 99; causes

of values of land, 125, 130, 145; distribution of values is the counter to distribution of commodities, 196; law of declining and advancing values, 204; shrinking of, 212; elusiveness of the supposed "hard pan" to be reached by shrinkage of, 212; sense of, determines success in business, 218; values which decline as society grows, 221; little waste in higher values, 224–226; of land is the capitalization of economic rent, 237; as affected by transportation, 241–253; of farm lands, products, and labor, 253–261 (Dodge); sense of value must be keen in the successful director of labor, 307; the surplus in one industry constitutes by exchange the values in another, 320; values given to raw materials by exporting only finished products, 322; relation of to money, 335; of commodities more variable usually than that of money, 336; of the standard monetary unit of most countries in United States currency, 338; overvalued metals seek coinage, 341; undervalued metals cannot circulate, but are melted, 342; fall in producing panic, 389; of criminal, 444; his capacity to produce has the same economic value to society, 440; aggregate value of land in India hardly greater than in New Jersey, 488; of wines in France, 497; of average imports and exports increase as their weight lessens, 518–521; of an extra dollar on Saturday night to the workman, 584; of British manufactures, 637; as quantities of woolens exported increase value declines, 673 (compare Tooke, Carey and Baird, 113 to 117); of English cotton goods exported and consumed, 685

Varnish, manufacture of taxed in China, 455; export of 611; import and revenue, 614

Vegetarian diet, relation to economic condition and political institutions, 402

Velvets, 672

Venezuela, monetary unit of, 338; balance of American trade with, 600

Venice, in glass making, 639; in woolens, 669

Vermont, why may not import free from Canada, 574–576; people whose products are the same can not trade, 574; Canada can not reap our prices because she did not help to sow their cost, 579; wools of, 672

Versatility of aims, when an obstacle to economy, 303

Vessels and steamers, export of, 611; American vessels reduced to a free competition with foreign in carrying ocean freights to and from American ports in 1816, 642; effect of laggard protection to iron and steel manufacture from 1790 to 1845 compared with English protection, to cripple American shipbuilding from 1855 to date, 648–649; ocean carrying trade of England built up, 656; by subsidies, 659, 662; treaties, 642, 655; piracy, 663; and righteousness, 608

Veto, its disuse in England, 408–410; power of in United States, 417; in India, 533

Vice, taxes on, to promote utilities, 463

Victoria, tariff of, 530; compared with New South Wales, 530; protects glass, upholstery, furniture, etc., 530

Vienna, 405

Vinegar, revenue on in United States paid by foreign producer, 586; exports, imports, and revenue, 611, 614

Virginia, early precedence, 149; slavery in, 384; culture of silk in, 631; glassmaking in colonial, 639; colony of, protected sheep, wool and wool manufacture, 676; salt product of, 693

Visionary, invention of power loom, 685

Voting, modes of in Roman Re-

public, 412; in United States, 417–429; plural voting on taxes in England, 479; property qualifications, 479
Vulcan and iron and steel, 645

W.

Wages, rate of, Carey on, 16; Brassey on, 35; not proportionate to ratio of capital to population (McCulloch), 168; wages a payment for service, 85; how employment for arises, 164; the first are presents, 165; may be high where capital is scarce, 170; are the effect of profits, 170; though appearing to be the leavings, 170; based on equivalence of exchange between employer and employed, 171–172; equality of division, 172–182; received by wages class in Great Britain, 176; in manufactures fixed in part by those in agriculture, 181; are paid for obedience only and not for muscular force or creative power, 183–184; Karl Marx's theory of, rests on a false basis, 184; losses of wages workers in strikes, 190; how wage workers may obtain the "profits" also, 213; when capital is risked workers earn profits, 222; promoted by large capitals, 227; low rate of in India, 227; law of increasing share of product to wages, how offset in new industries, 234; Bastiat on the preference of wages to profits or title by working men, 234; wages are capital in smaller quantity, 235; are cost of labor expended in production, 238; rates of on farms, 253–261; a payment for labor time, 288; differs from fee, 289; commission, 290; royalty or share, 290; cause of and of rate, is in profits, 293–316; population not a check on wages, 295; wages lower in countries of slow production, 297–298; and without machinery, 298; lower in country than city, 298; rates of, fixed by labor-saving machines, 299; causes which compel men to work for wages, 307; wages class excel in fervor and generosity, but fail in calculation and prudence, 309; trades unions, 310; in what industries wage-workers get the highest ratio of product, 313; effect of higher wages than the competitive rate to check extensions of works, 313, 314; are wages increased by profit-sharing? 314; relative in different countries, 315; why higher in Great Britain than in Germany, France, and Russia, 317; not increased by lessening population, 320, 321; of labor in proportion to its social use, 323; of women, 325–328; economy of working for, 433; small number of wage workers in France and large number of small employers, 496; rates of wages for blacksmiths and iron-puddlers in 1867 in United States, Great Britain, Prussia, Saxony, and Switzerland, 511; lower in Germany than Great Britain, causes of, 516; increase of in Germany with increase of protection, 523–524; English acts to regulate wages, 555; higher wages (Sidgwick) by protection, 566; wages affected by excessive supply of workmen, 574; Perry's error (with Ricardo) in supposing wages must be lower because capital is higher in America than in Great Britain, 579–582; comparison of rates of in Massachusetts and England, 580–582; Wendell Phillips on the moral advantages of good wages, 583; why rates of, needed tariff protection where equivalent efforts here and abroad would produce same commodities, 585; wages promoted by protection, 623–627; wages paid in Canadian manufactures, 667–668; wages depend on the value of commodities and not on their quantity, 673
Wages fund theory, Sidgwick, Mill, and Thornton on, 15; Carey

on rate of wages, 16; wages, rent, and interest as shares depend on who distributes, 163; defined by Cairnes, Mill, Brassey, Thornton, 290–292; the aggregate wage fund tends toward equal sharing with aggregate returns of capital, 311–314; reason why wages are eight times greater in United States than in China lies in animal and machine power, 542; why wages are low in China and India, 625

Want and wealth, the complaints of each other, 401; object of American labor organizations is not to prevent want, but to control industry, 310, 328, 390, 597; man's first want, 645

War, effect of on prices, 113; of allied powers with Napoleon, 112; effect of on means of payment, 114, 221; on industry, 211; on prices, 221; war debts, 353; paying expenses of as incurred, 353; Adams and Laughlin on, 353; exhaustion of war postponed, 354; effect of as to crises, 380; absence of gold at outbreak of war of 1861, 221; close of war in United States produces monetary crises in England, 389; business revived by, 385; as a productive agency, 439; crime in social war, 440; expense of war debt in United States, 468; rise of revenue during war with "Confederacy," 470; effects of war tariff, 469–472; Russia's escape from in part, 529; to force opium on China, 534; liabilities to war increased by importing what we can produce (Jefferson), 598; growth of manufactures in United States during war of 1806–1815, 641; making implements of war the first manufacture, 644; how the United States would have avoided the war for secession, 650; economic effects of war on northern and southern states, 688

Washington, capture of, 437

Washing machines, American export of, 596

Waste of forests, 148; of animals, 149; by misdirection of industry, mainly incurred by the enterprisers, 191; small, of society, 224; servants, 226; small in the higher values, great in the lower, 226; waste involved in strikes, 310, 314, 328; of being without an army in United States, 437; of life in social struggles and fanaticism, 446, 447; relative waste of labor in China and in western nations as each is seen by the other, 545, 550; in tillage in China, 551

Watches, American machine-made, superiority of abroad, 596; exports, duties, 611; imports, revenue, 614

Ways, 430, 432

Wax, export of and duties on, 611; imports and revenue, 614

Wealth, conflicts of definition, 5; is money wealth in the sense held by mercantile school, 18; defined, 41; its economic meaning distinguished from its social, 41; relation of, to civilization, 42; as defined by Smith, Carey, Bastiat, Roscher, Fawcett, Mill, Jevons, Sidgwick, Smith again, Roscher, and "Wealth," 41–43; Carey's definition reviewed, 43–47; relation of, to want, 45; need not have exchange value, 46; relation to subordination and coercion, 47; savage life is absence of, 47; Fawcett, Smith and Carey agree on this, 48; ownership of property in common retards growth of, 49–54; social, 60–65; of nations, 65–69; of India, 66; Evanescence of, 69; destruction of, in maintaining government, 70; disappearance of values of land, 71; reproductive and enjoyable, 72; social endures longest, 72; vital most essential, 72; relation of owner to social wealth is custody only, 93; consumers' and producers', 94; Jevons, Gossen and Sidgwick on forms of, 94; also Senior and Banfield, 94; distribution of, and of products, 196;

consists in inequality of means, 201; it paralyzes its own power when equalized, 201; equal diffusion of enjoyable, depends on unequal accumulation of reproductive, 204; redistribution of, by investment, ostentation, luxury and waste, 212–214; shrinkage in value of reproductive, produces less suffering if held by large owners, 222; consumption of, by rich and poor, 225–226; loss of, may produce crisis, 378; and want are the steam and vacuum in the social engine, 401; makes a people æsthetic, poverty, quarrelsome, 402; government by the rich, 405; voting according to, in Rome, 412; increasing power of, in America, 414; the chief foe to crime, 442; but inequalities of fortune (Quetelet) tend to crime, 442

Weapons, early manufacture of, 645

Wearing apparel, export of, 611

Weaving, inventions in, 681, 684–685

Weighing machines, superiority of American abroad, 596, 611, 614

Weight of products lessens as their values increase, 518–521

West Indies, culture of silk in, 631; England's trade with, 689; purchases from, bear no proportion to sales to, 600

Wheat, prices and scarcity in England, 116; effect of free trade in, 118–119; rate of growth of, under seed selection and thin planting, 231; cost of production in Iowa and England as affected by rent and transportation, 243–257; average crop per acre in England, 254; prices in war of 1812–15, 380; German imports and exports of, 519; protective duties on in Victoria, 530; prices not reduced in England by repeal of protective duties, 558; quantity of wheat crop, 559; decline of cultivation in England, 559; in Scotland and Ireland one half, 559

Wheeling, Va., glass, 643

Window glass, when and where first made, 639

Wines, taxes on, 475; English revenue from, 480; manufacture of, in France, 497; duties on in England, 500; in France, 503; Germany, 520; export of American, 611; import and revenue, 614

Wisconsin, woolen manufacture in, 666

Women, wages of, 325–328; voting, 435–437; crime, 442; of sedentery, 443; large number of work in France, 497; in Germany, 524, 525; large proportion withdrawn from labor in United States, 525; relative wages of, to men in Massachusetts and England, 582; in strikes, 328; causes of large American demand for silks, 633; shoes of women exported, 697–698

Wood, 519; wages of work in in Great Britain and Massachusetts, 580; wood, lumber and timber, export of and duties on import, 611; import and revenue from, 614

Wool, trade between Belgium and France, 27; Great Britain and France, 27; conditions of weaving at a profit, 319; tariff of 1824–28 as to, 383; change in German wool and woolen trade under protection, 515; trade of wool for cloth between Germany and England, 518–520; revenue on imports of, into United States, not paid by consumers, 586; this point more fully shown, 679–682; see also chart of prices, *ib.*; antiquity of wool-growing, 668; a finished product in what sense, 671; qualities of wool, 672; and woolens, 672; quantities required for consumption relatively to population, 672–673; protective duties on, since 1824, 676; "free wool" would mean great cry and little wool, 676; export of, from Australia, 676; increased yield of, in United States, since 1850, 677; duties

on, were based on sound principles, 677; approved by all producers, 677; over periods of moderate length, interests of producers and consumers the same, 677; "cotton wool," 684
Woolens, manufacture of, returns to labor and capital in, 312; woolen manufacturers of England seeking the suppression of those of Ireland, 491; in France, 503; trade in, between Germany and England, 518–520; manufacture in Canada, 531; statutes to protect in England 555; wages in, in England, and Massachusetts, 580, 582; woolen blankets, Perry's error as to duties being a tax on consumer stated, 589; refuted, 590, 679; identity of prices in England and America, 590; export of, 611; imports and revenue, 614; protection to woolen manufacture in Canada and effects of, 665, 666; extraordinary prices of ancient woolens, 669; manufacture of closely dependent on iron and steel, 677
Wool-sack, why so called, 670
Work, difficulties of beginning, 233; at first despised, 234; at first an adjunct to hunting or war, 234; cost in work not identical with cost in money, 573, 574; work only exists where employers make profits, 625
Workmen (see Labor, Wages, Strikes); number of employed, a reason (Smith) for protection, 556; wages reduced by cutting them off from the land, 574; should be attracted to where their effort will win largest returns, 574; moral value of an extra dollar to, 583; reduced by free trade, 635, 637; number of discharged and suffering, in 1816–19, in United States, 642; employed in Canadian manufactures, 667, 668; decline of, in English silk manufacture, 635, 637; decline of numbers in woolen, 673; increase of number in Europe, 674; large proportion of workers in cotton in Manchester, 685; in cotton manufacture, 689
World, relative incomes of nations, 36; products of iron, steel, and coal, 650
Worsted, wages of work in Massachusetts and England, 582; wools for, 672
Wrought iron, English and American prices of, 590
Wurtemburg, 515, 523, 524

Y.

Yarn, import and export of Germany, 519, 520
Yen, 338

Z.

Zemstvo, 530
Zinc, exports and imports of and revenue, 611, 614
Zollverein, inception and work of, 514–521; population of and movement of German states into, 515; what it could do for profits and wages, 517